Val
 Ala
 Val
 Arg
 Thr
 Arg
 Gly
 Lys
 Asp
 Leu
 Gly
 Ser
 Leu
 Asp
 Val

 Ser
 Glu
 Val
 Ile
 Glu
 Lys
 Leu
 Gln
 Glu
 Ile
 Arg
 Ser
 Arg
 Ser
 Leu

 625
 630
 635
 640

 Gln
 Glu
 G

<210> 9378

<211> 107

<212> PRT

<213> Enterobacter cloacae

<400> 9378

<210> 9379

<211> 235

<212> PRT

<213> Enterobacter cloacae

<400> 9379

Leu Pro Phe Arg Ile Phe Pro Pro Ala Leu Thr Pro Arg Trp Ile Ser 10 Arg Leu Arg Gly Cys Ala Pro Arg Leu Lys Val Asn His Met Leu Asp 20 25 Lys His Leu His Pro Arg Leu Lys Pro Gly Leu Asn Gln Leu Ala Ala 40 45 Ala Leu Asp Lys Pro Phe Ile Thr Pro Asp Gly Leu Thr Leu Ala Gly 55 60 Phe Ala Ile Gly Val Leu Ala Leu Pro Phe Leu Ala Leu Gly Trp Tyr 70 75 Pro Ala Ala Leu Ile Ala Ile Val Leu Asn Arg Leu Leu Asp Gly Leu 90 Asp Gly Ala Leu Ala Arg Arg Gly Leu Thr Asp Ala Gly Gly Phe · 105 110 Leu Asp Ile Ala Leu Asp Phe Leu Phe Tyr Ala Leu Val Pro Phe Gly 120 Phe Ala Leu Ala Ala Pro Ala Asp Asn Ala Ile Ala Ala Ala Trp Leu 135 140 Leu Phé Ala Phe Met Gly Thr Gly Ser Ser Phe Leu Ala Phe Ala Ala 155 150 Leu Ala Gly Lys His Asp Ile Asp Asn Pro Gly Tyr Ala His Lys Ser 170 165 Leu Tyr Tyr Ile Gly Gly Leu Thr Glu Gly Thr Glu Thr Ile Ala Leu 180 185 Phe Val Leu Cys Ser Leu Phe Pro Ala His Phe Ala Leu Phe Ala Trp 200 Val .Phe Gly Ala Leu Cys Trp Leu Thr Thr Thr Arg Ile Trp Ser



215 Gly Tyr Ile Thr Leu Lys Ser Leu Pro Arg 230 <210> 9380 <211> 500 <212> PRT <213> Enterobacter cloacae <400> 9380 Gly Glu Asn Ser Met Thr Leu Trp Ile Asn Gly Asp Trp Val Thr Gly Glu Gly Asp Ala Arg Thr Lys Thr Asn Pro Val Gly Gln Glu Val Leu Trp Ser Gly Asn Asp Ala Ser Ala Gly Gln Val Glu Gln Ala Cys Gln 40 Ala Ala Arg Arg Ala Phe Pro Ala Trp Ala Lys Arg Pro Phe Ser Glu Arg Gln Ala Leu Val Glu Lys Phe Ala Ala Leu Leu Glu Ala Asn Lys Ala Glu Leu Thr Arg Ile Ile Ala Cys Glu Thr Ser Lys Pro Arg Trp 90 Glu Ala Thr Thr Glu Val Thr Ala Met Ile Asn Lys Ile Ala Ile Ser 100 105 Val Lys Ala Tyr His Thr Arg Thr Gly Glu Gln His Thr Glu Met Pro 120 Asp Gly Ala Ala Thr Leu Arg His Arg Pro His Gly Val Leu Ala Val 135 140 Phe Gly Pro Tyr Asn Phe Pro Gly His Leu Pro Asn Gly His Ile Val 150 155 Pro Ala Leu Leu Ala Gly Asn Thr Val Ile Phe Lys Pro Ser Glu Leu 170 165 Thr Pro Leu Thr Gly Glu Ala Val Val Lys Leu Trp Glu Gln Ala Gly 180 185 Leu Pro Pro Gly Val Leu Asn Leu Val Gln Gly Gly Arg Glu Thr Gly 195 · 200 Gln Ala Leu Ser Ala Leu Ser Asp Ile Asp Gly Leu Leu Phe Thr Gly 215 220 Ser Ala Gly Thr Gly Tyr Gln Leu His Arg Gln Leu Ala Gly Gln Pro 230 235 Glu Lys Ile Leu Ala Leu Glu Met Gly Gly Asn Asn Pro Leu Ile Val 245 250 Glu Asp Pro Glu Asp Ile Asp Ala Ala Val His Leu Thr Ile Gln Ser 265 Ala Phe Ile Thr Ala Gly Gln Arg Cys Thr Cys Ala Arg Arg Leu Leu 280 Val Lys Arg Gly Ala Gln Gly Asp Ala Phe Leu Lys Arg Leu Val Glu 295 300 Val Ser Ala Arg Leu Val Pro Ala Lys Trp Asp Ala Glu Pro Gln Pro 310 315 Phe Ile Gly Gly Leu Ile Ser Gly Gln Ala Ala Leu Asn Val Leu Lys 330 Ala Trp Gln Glu His Val Ala Arg Gly Ala Lys Thr Leu Leu Glu Pro 345 Lys Leu Val Gln Pro Gly Thr Ser Leu Leu Thr Pro Gly Ile Ile Asp 360 Met Ser Ala Thr Ser Asn Val Pro Asp Glu Glu Val Phe Gly Pro Leu 375 380 Leu Cys Val Trp Arg Tyr Asp Asp Phe Glu Ser Ala Ile Glu Met Ala 390 - 395

Asn Asn Thr Arg Tyr Gly Leu Ser Ser Gly Leu Ile Ser Pro His Arg

405 410 Glu Lys Phe Asp Gln Leu Leu Glu Ala Arg Ala Gly Ile Val Asn 425 Trp Asn Lys Pro Leu Thr Gly Ala Ala Ser Thr Ala Pro Phe Gly Gly 440 445 Val Gly Ala Ser Gly Asn His Arg Ala Ser Ala Trp Tyr Ala Ala Asp 455 460 Tyr Cys Ala Trp Pro Met Ala Ser Leu Glu Thr Pro Ala Leu Thr Leu 470 475 Pro Glu Thr Leu Asn Pro Gly Leu Asp Phe Thr Glu Gly Asp Ala His 490 Glu Ser Ala 500

210 \ 0201

<210> 9381 <211> 120

<212> PRT

<213> Enterobacter cloacae

<400> 9381

Pro Gln Ala Pro Lys Ala Gln 115 12

<210> 9382

<211> 97

<212> PRT

<213> Enterobacter cloacae

<400> 9382

<210> 9383

<211> 352

<212> PRT

## <213> Enterobacter cloacae

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<400> 9383
Gln Glu Thr Ser Met Ser Glu Gln Thr Ile Arg Leu Thr Gln Tyr Ser
                                    10
His Gly Ala Gly Cys Gly Cys Lys Ile Ser Pro Lys Val Leu Glu Thr
            20
                                25
Ile Leu His Ser Glu Gln Ala Lys Phe Val Asp Pro Asn Leu Leu Val
                            40
Gly Asn Glu Thr Arg Asp Asp Ala Ala Val Tyr Asp Leu Gly Asn Gly
                        55
Thr Ser Ile Ile Ser Thr Thr Asp Phe Phe Met Pro Ile Val Asp Asn
                                        75
Pro Phe Asp Phe Gly Arg Ile Ala Ala Thr Asn Ala Ile Ser Asp Ile
                                    90
Phe Ala Met Gly Gly Lys Pro Ile Met Ala Ile Ala Ile Leu Gly Trp
            100
Pro Ile Asn Asn Leu Pro Pro Glu Ile Ala Arg Asp Val Ile Glu Gly
                            120
Gly Arg Phe Ala Cys Gln Gln Ala Gly Ile Ala Leu Ala Gly Gly His
                        135
Ser Ile Asp Ala Pro Glu Pro Ile Phe Gly Leu Ala Val Thr Gly Val
                    150
                                        155
Val Pro Thr Glu Arg Val Lys Arg Asn Ser Thr Ala Gln Pro Gly Cys
                165
                                    170
Lys Leu Phe Leu Thr Lys Pro Leu Gly Ile Gly Val Leu Thr Thr Ala
            180
                                185
Glu Lys Lys Ser Leu Leu Lys Pro Glu His Ile Gly Leu Ala Thr Glu
        195
                            200
                                                205
Val Met Cys Gln Met Asn Leu Ala Gly Ala Ala Phe Ala Asn Ile Asp
                        215
                                            220
Gly Val Lys Ala Met Thr Asp Val Thr Gly Phe Gly Leu Leu Gly His
                    230
                                        235
Leu Ser Glu Val Cys Gln Gly Ala Gly Val Gln Ala Gln Val Arg Tyr
                245
                                    250
Gln Asp Val Pro Lys Leu Pro Gly Val Glu Glu Tyr Ile Ala Gln Gly
                                265
                                                    270
Ala Leu Pro Gly Gly Thr Gln Arg Asn Phe Ala Ser Tyr Gly His Leu
                            280
Met Gly Glu Met Pro Glu Ala Trp Arg Asn Leu Leu Cys Asp Pro Gln
                                            300
                        295
Thr Ser Gly Gly Leu Leu Ala Val Thr Pro Glu Ala Glu Ala Asp
                    310
                                        315
Val Gln Ala Thr Ala Ala Glu Phe Gly Ile Thr Leu Thr Ala Ile Gly
                325
                                    330
Glu Leu Val Thr Ala Arg Gly Gly Arg Pro Met Ile Glu Ile Arg
                                345
```

<210> 9384

<211> 114

<212> PRT

<213> Enterobacter cloacae

## <400> 9384

 Arg Asp Thr
 Leu Lys Ile Pro Ser Gly Ser Thr Val Ile Asp Ile Asn

 1
 5
 10
 15

 Asp Ala Lys Glu Thr Lys Ser Met 20
 25
 Tyr Ala Met Ala Ala Leu 30

 Cys Leu Met Val Ser Ala Gly Ala Gln Ala Asp Arg Ile Arg Pro Asp 35
 40
 45

 Val Glu Val Asn Val Pro Pro Glu Val Phe Ser Ala Gly Gly Gln Arg

50
Ala Gln Pro Cys Asn Gln Cys Cys Ile Tyr Gln Asp Gln Asn Tyr Ser
65
70
60
Glu Gly Ala Val Val Arg Ala Asp Gly Val Leu Leu Gln Cys Gln Arg
85
90
95
Asp Glu Arg Thr Leu Ser Thr Asn Pro Leu Val Trp Arg Arg Val Lys
100
105
110

<210> 9385 <211> 380 <212> PRT <213> Enterobacter cloacae

<400> 9385

Arg Gly Ala Leu Cys Pro Cys Ala Asp Arg Gln Arg Gly Arg Gly Gln Asn Trp Leu Arg Ser Phe Cys Ala Gly Leu Arg Thr Gly Glu Val Arg Gly Val Ile Met Met Val Ile Arg Pro Val Ala His Gly Asp Leu Ala Gly Leu Met Gln Leu Ala Gly Lys Thr Gly Gly Gly Leu Thr Ser Leu 55 Pro Ala Asp Glu Lys Thr Leu Ser Ala Arg Ile Glu Arg Ala Leu Gln Thr Trp Gln Gly Thr Leu Pro Lys Ser Glu Gln Gly Tyr Val Phe Val 85 Leu Glu Asp Thr Asp Thr Gly Thr Val Ala Gly Ile Cys Ala Ile Glu 105 Val Ala Val Gly Leu Asn Asp Pro Trp Tyr Asn Tyr Arg Val Gly Thr 120 115 125 Met Val His Ala Ser Lys Glu Leu Asn Val Tyr Asn Ala Leu Pro Thr 135 140 Leu Phe Leu Cys Asn Asp His Thr Gly Ala Ser Glu Leu Cys Thr Leu 150 155 Phe Leu Asp Pro Asp Trp Arg Lys Glu Gly Asn Gly Tyr Leu Leu Ser 170 165 Lys Ser Arg Phe Met Phe Met Ala Ala Phe Arg Asp Arg Phe Asn Glu 180 185 Lys Val Val Ala Glu Met Arg Gly Val Ile Asp Glu Thr Gly Tyr Ser 200 205 Pro Phe Trp Glu Ser Leu Gly Glu Arg Phe Phe Ser Met Glu Phe Ser 215 220 Arg Ala Asp Tyr Leu Cys Gly Thr Gly Gln Lys Ala Phe Ile Ala Glu 230 235 Leu Met Pro Lys His Pro Ile Tyr Thr His Phe Leu Thr Pro Glu Ala 250 Gln Ala Val Ile Gly Glu Val His Pro Gln Thr Ala Pro Ala Arg Ala 265 Val Leu Glu Lys Glu Gly Phe Arg Tyr Arg Asn Tyr Val Asp Ile Phe 280 Asp Gly Gly Pro Thr Leu Glu Cys Asp Ile Asp Arg Val Arg Ala Ile 295 300 Arg Lys Ser Arg Leu Val Glu Val Ser Glu Cys Gln Pro Ala Pro Gly 310 315 Glu Trp Pro Ala Cys Leu Val Ser Asn Glu Asn Tyr Thr Asn Phe Arg 325 330 Ala Met Leu Val Arg Thr Asn Pro Ser Cys Glu Arg Leu Val Leu Thr 345

Ala Ala Gln Leu Asp Ala Leu Lys Cys Asn Ala Gly Asp Thr Val Arg

360 Leu Val Arg Leu Cys Pro Glu Glu Lys Thr Ala 375 <210> 9386 <211> 453 <212> PRT <213> Enterobacter cloacae <400> 9386 Ile Arg Gly Trp Ile Leu Leu Arg Val Thr Pro Met Lys Ala Arg Glu Val Asn Phe Asp Gly Leu Val Gly Leu Thr His His Tyr Ala Gly Leu 25 Ser Phe Gly Asn Glu Ala Ser Thr Lys His Arg Phe Gln Val Ser Asn Pro Lys Leu Ala Ala Lys Gln Gly Leu Leu Lys Met Lys Ala Leu Ser Asp Ala Gly Phe Pro Gln Ala Val Ile Pro Pro Gln Glu Arg Pro Asn Val Ala Val Leu Arg Gln Leu Gly Phe Ser Gly Thr Asp Glu Gln Val 90 85 Val Glu Lys Ala Gly Thr Gln Thr Pro His Leu Leu Ser Ala Ala Ser 105 Ser Ala Ser Ser Met Trp Val Ala Asn Ala Ala Thr Val Ala Pro Ser 120 115 Ala Asp Thr Leu Asp Gly Lys Val His Leu Thr Val Ala Asn Leu Asn 135 140 Asn Lys Phe His Arg Ala Ser Glu Ala Glu Thr Thr Gly Arg Val Leu 150 155 Arg Ala Ile Phe Asn His Asp Ala His Phe Glu Val His Ser Ala Leu 165 170 Pro Gln Val Ala Met Phe Gly Asp Glu Gly Ala Ala Asn His Asn Arg 185 180 Leu Gly Gly Asp Tyr Gly Glu Pro Gly Leu Gln Leu Phe Ile Tyr Gly 200 205 Arg Glu Glu Gly Gly His Ala Ala Pro Val Arg Tyr Pro Ala Arg Gln 215 220 Thr Leu Ala Ala Ser Gln Ala Val Ala Arg Leu Asn Gln Val Asn Pro 235 230 Ser Gln Val Ile Phe Ala Gln Gln Asn Pro Gln Val Ile Asp Gln Gly 245 250 Val Phe His Asn Asp Val Ile Ala Val Ser Asn Arg Gln Val Leu Phe 260 265 Cys His Glu Gln Ala Phe Ala His Gln Glu Lys Leu Leu Ala Thr Leu 280 285 Arg Glu Arg Val Pro Gly Phe Met Pro Ile Gln Val Pro Thr Gln Ala 295 300 Val Ser Val Gln Asp Ala Val Glu Thr Tyr Leu Phe Asn Ser Gln Leu 315 310 Leu Ser Arg Asp Asp Gly Ser Met Met Leu Val Leu Pro Gln Glu Ser 330 Arg Asn His Gln Gly Val Trp Arg Tyr Leu Ser Glu Leu Val Gln Ala 345 Asp Asn Pro Ile Asp Glu Leu Arg Val Phe Asp Leu Arg Glu Ser Met 360 Ala Asn Gly Gly Pro Ala Cys Leu Arg Leu Arg Val Val Leu Thr 375 380 Pro Glu Glu Leu Gln Ala Val Asn Pro Ala Val Met Met Asn Asp Thr 395 390

Leu Phe Asn Thr Leu Asn Asp Trp Val Asp Arg Tyr Tyr Arg Asp Arg

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405
                                    410
Leu Val Gln Ala Asp Leu Val Asp Pro Gln Leu Leu Arg Glu Gly Arg
           420
                               425
Glu Ala Leu Asp Ala Leu Ser Thr Ile Leu Gln Leu Gly Ser Val Tyr
       435
                            440
Pro Phe Gln Arg
   450
<210> 9387
<211> 325
<212> PRT
<213> Enterobacter cloacae
<400> 9387
Gly Asp Asp Met Glu Asn Leu Leu Ala Leu Thr Leu Ala Glu Glu Thr
Pro Glu Arg Gln Glu Gly Ala Gly Pro Ser Phe His Trp Arg Trp Leu
Gly Pro Gly Val Leu Glu Leu Thr Pro Thr Gly Lys Tyr Asn Leu Ser
                            40
Leu Leu Ser Thr Gly Ile His Gly Asn Glu Thr Ala Pro Val Glu
                        55
Ile Val Glu Leu Leu Arg Ala Leu Tyr Arg Ala Glu Phe Thr Leu
                    70
                                        7.5
His Cys Arg Leu Leu Val Val Leu Gly Asn Pro Pro Ala Leu Ala Gln
                                    90
               85
Asn Lys Arg Tyr Leu Val Ser Asp Ile Asn Arg Met Phe Gly Gly Arg
                               105
           100
Trp Ala Gln Phe Pro Gln Ser Asp Glu Thr Thr Arg Ala Gln Trp Leu
       115
                           120
Glu Lys Val Val Thr Ala Phe Phe Ala Gly Ala Gly Glu Thr Arg Trp
                       135
                                            140
His Leu Asp Leu His Thr Ala Ile Arg Ala Ser Tyr His Val Arg Phe
                   150
                                        155
Gly Val Leu Pro Gln Arg His Gln Pro Trp Asp Glu Ala Phe Leu Thr
               165
                                    170
Trp Leu Gly Asp Ala Gly Leu Glu Ala Leu Val Phe His Gln Thr Pro
           180
                               185
Gly Gly Thr Phe Thr His Phe Thr Cys Glu Asn Val Gly Ala Leu Ser
                           200
                                                205
Cys Thr Leu Glu Leu Gly Lys Ala Leu Pro Phe Gly Gln Asn Asp Leu
                       215
                                           220
Thr Arg Phe Thr Pro Thr His Gln Ala Leu Arg Ala Leu Leu Ala Gly
                   230
                                        235
Val Ala Pro Glu Pro Thr Arg Glu Pro Val Val Arg Tyr Arg Val Val
                                    250
               245
Gln Gln Ile Thr Arg Gln Ser Glu Ala Phe Gln Leu His Met Ala Pro
                               265
His Thr Leu Asn Phe Thr Pro Phe Arg Gln Gly Val Leu Leu Ala Glu
                           280
Asp Gly Glu Thr Arg Tyr Ala Val Gln Lys Ser Thr Glu Tyr Val Leu
                       295
Phe Pro Asn Pro Ser Val Ala Phe Gly Leu Arg Ala Gly Leu Met Leu
                    310
Glu Lys Met Pro
```

<sup>&</sup>lt;210> 9388 <211> 236

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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<400> 9388
Asp Arg Arg Ala Pro Val Tyr Lys Ser Glu Asn Ala Val Asp Arg Thr
Gly Gly Phe Ser Phe Ile Pro Cys Leu Arg Ser Gly Leu Thr Ala Ala
Asp Asn Thr Ser Val Lys Met Pro Trp Arg Thr Val Arg Pro Ser Gly
Val Val Met Glu Phe Phe Asp Ile Arg Lys Met Pro Val Ser Leu Trp
                        55
Arg Asn Gly Ala Gly Glu Thr Arg Glu Ile Cys Cys Phe Pro Pro Ala
                                        75
Thr Arg Asp Phe Phe Trp Arg Ala Ser Ile Ala Ser Ile Ala Ser Asn
Gly Glu Phe Ser Ala Phe Pro Gly Val Asp Arg Val Ile Thr Leu Leu
                                105
Glu Gly Gly Glu Val Thr Leu Asp Ala Gly Arg Ala Phe Cys His Thr
       115
                            120
Leu Lys His His Gln Pro Tyr Arg Phe Ala Gly Asp Leu Ala Val Lys
                        135
   130
                                            140
Ala Val Leu Thr Glu Gly Gln Met Ser Met Asp Phe Asn Ile Met Thr
                    150
                                        155
Arg Arg Asp Cys Cys Gln Ala Lys Val Arg Val Ala Thr Arg Thr Phe
               165
                                    170
Thr Thr Phe Ala Ser Arg Gly Gly Val Val Phe Val Leu Ser Gly Ala
           180
                                185
Trp Gln Leu Gly Asp Lys Leu Leu Thr Ala Asp Gln Gly Ala Ser Trp
                            200
Glu Ala Gly Ser His Thr Leu Arg Leu Leu Glu Thr Lys Gly Ser Leu
                       215
Leu Phe Ser Glu Ile Thr Trp Leu Pro Gly His
<210> 9389
<211> 457
<212> PRT
<213> Enterobacter cloacae
<400> 9389
Gly Tyr Phe Pro Met Ser Lys Val Ile Ala Ser Leu Glu Lys Val Leu
                                    10
Leu Pro Phe Ala Val Lys Ile Gly Lys Gln Pro His Val Asn Ala Ile
Lys Asn Gly Phe Ile Lys Leu Met Pro Leu Thr Leu Ala Gly Ala Met
Phe Val Leu Ile Asn Asn Val Phe Leu Ser Phe Gly Glu Gly Ser Phe
Phe Tyr Ser Leu Gly Ile Arg Leu Asp Ala Ser Thr Ile Glu Thr Leu
Asn Gly Leu Lys Ala Ile Gly Gly Asn Val Tyr Asn Gly Thr Leu Gly
                                    90
Ile Met Ser Leu Met Ala Pro Phe Phe Ile Gly Met Ala Leu Ala Glu
                                105
Glu Arg Lys Val Asp Pro Leu Ala Ala Gly Leu Leu Ser Ile Ala Ala
                            120
                                                125
Phe Met Thr Val Thr Pro Tyr Ser Val Gly Asp Ala Tyr Ala Val Gly
                        135
                                            140
Ala Asn Trp Leu Gly Gly Ala Asn Ile Ile Ser Gly Ile Ile Ile Gly
                   150
                                        155
Leu Val Val Ala Glu Met Phe Thr Phe Ile Ile Arg Arg Asn Trp Val
```

175

```
Ile Arg Leu Pro Asp Ser Val Pro Ala Ser Val Ser Arg Ser Phe Ser
                                185
Ala Leu Ile Pro Gly Phe Ile Ile Leu Ser Ile Met Gly Ile Ile Ala
                            200
                                                205
Trp Ala Leu Ser His Trp Gly Thr Asn Phe His Gln Ile Ile Met Asp
                        215
                                            220
Ser Ile Ser Thr Pro Leu Ala Ser Met Gly Asn Val Val Gly Trp Ala
                    230
                                        235
Tyr Val Ile Phe Thr Ser Leu Leu Trp Phe Phe Gly Val His Gly Ser
                245
                                    250
Leu Ala Leu Ala Leu Asp Ser Gly Ile Met Thr Pro Trp Ala Leu
            260
                                265
                                                    270
Glu Asn Val Ala Leu Tyr Gln Gln Tyr Gly Ser Val Asp Ala Ala Leu
                            280
Ala Ala Gly Lys Thr Phe His Val Trp Ala Lys Pro Met Leu Asp Ser
                        295
Tyr Ile Phe Leu Gly Gly Thr Gly Ala Thr Leu Gly Leu Ile Ile Ala
                    310
Val Phe Ile Val Ser Arg Arg Ala Asp His Arg Gln Val Ala Lys Leu
                325
                                    330
Ala Leu Pro Ser Gly Ile Phe Gln Ile Asn Glu Pro Ile Leu Phe Gly
            340
                                345
Leu Pro Ile Ile Met Asn Pro Val Met Phe Ile Pro Phe Ile Leu Val
                            360
                                                365
Gln Pro Leu Leu Ala Ala Ile Thr Leu Thr Ala Tyr Tyr Leu Gly Ile
                        375
                                            380
Ile Pro Pro Val Thr Asn Ile Ala Pro Trp Thr Met Pro Ala Gly Leu
                    390
                                        395
Gly Ala Phe Phe Asn Thr Asn Gly Ser Val Ala Ala Phe Leu Leu Ala
               405
                                    410
Ile Phe Asn Leu Gly Ile Ala Thr Leu Leu Tyr Met Pro Phe Val Ala
                                425
           420
                                                    430
Ile Ala Asn Lys Ala Ala Thr Val Ile Asp Glu Glu Glu Ser Glu Glu
                            440
Asp Ile Ala Leu Ala Leu Lys Phe
   450
```

<210> 9390

<211> 117

<212> PRT

<213> Enterobacter cloacae

<400> 9390

 Lys
 Met
 Leu
 Asp
 Leu
 Glu
 Ser
 Ile
 Val
 Ala
 Glu
 Glu
 Thr
 Ala
 Glu
 Asn

 1
 5
 10
 10
 15
 15

 Asp
 Leu
 Glu
 Val
 Val
 Met
 Gly
 Leu
 Ile
 Ile
 Asn
 Ser
 Gly
 Gln
 Ala

 Arg
 Ser
 Leu
 Ala
 Tyr
 Ala
 Ala
 Leu
 Lys
 Gln
 Ala
 Lys
 Gln
 Gly
 Asp
 Phe

 35
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 40
 45
 45
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Glu Lys Met Gln 115 <211> 278

```
<212> PRT
<213> Enterobacter cloacae
<400> 9391
Gln Glu Val Ser Thr Met Glu Ile Lys Thr Ala His Glu Gln Gln Leu
                                    10
Phe Asn Gly Lys Asn Phe His Val Val Ile Tyr Asn Lys Thr Glu Ser
            20
Ala Ser Gly Leu His Gln His Asp Tyr Tyr Glu Phe Thr Ile Val Leu
                            40
Thr Gly Arg Tyr Tyr Gln Glu Ile Asn Gly Lys Arg Val Leu Leu Glu
Arg Gly Asp Phe Val Phe Leu Pro Met Gly Ser Tyr His Gln Ser Phe
                    70
                                        75
Tyr Glu Phe Gly Ala Thr Arg Ile Leu Asn Val Gly Val Ser Arg Arg
                                    90
Phe Phe Glu Lys His Tyr Leu Pro Leu Val Pro Phe Cys Phe Val Ala
                                105
Ser Gln Val Tyr Arg Val Lys Asn Glu Phe Met Thr Trp Ile Glu Thr
                            120
Val Ile Ala Ser Leu Asn Phe Arg Asp Asn Glu Phe Asp Glu Phe Ile
                        135
Glu Thr Val Thr Phe Tyr Val Met Asn Arg Leu Arg His His Arg Glu
                    150
                                        155
Glu Gln Gln Val Val Asp Asp Ile Pro Gln Trp Leu Arg Ser Thr Val
                                    170
                165
Glu Leu Met His Asp Lys Gly Gln Phe Ser Asp Asn Ala Leu Glu Asn
                                185
            180
Met Val Ala Leu Ser Gly Lys Ser Gln Glu Tyr Leu Thr Arg Ala Thr
                            200
        195
Gln Arg Tyr Tyr Arg Lys Thr Pro Val Gln Ile Ile Asn Glu Ile Arg
                        215
                                            220
Ile Asn Phe Ala Lys Lys Gln Leu Glu Ile Thr Asn Tyr Ser Val Thr
                    230
                                        235
Asp Ile Ala Tyr Glu Ser Gly Tyr Ser Ser Pro Ser Leu Phe Ile Lys
                                    250
                245
Thr Phe Lys Lys Leu Thr Ser Phe Thr Pro Asn Ser Tyr Arg Lys Asn
            260
                                265
Leu Thr Val Ile Asn
        275
<210> 9392
<211> 262
<212> PRT
<213> Enterobacter cloacae
<400> 9392
Glu Thr Glu Thr His Thr Pro Leu Arg Gly Gly Ala Met Glu Asn Leu
                                    10
Leu Ile Val Asn Ala Asp Asp Phe Gly Leu Ser Lys Gly Gln Asn Tyr
Gly Ile Ile Glu Ala Cys Arg Arg Gly Val Val Thr Ser Thr Thr Ala
Leu Ile Asn Gly Glu Ala Val Glu His Ala Ala Gln Leu Ser Arg Glu
Leu Pro Glu Leu Gly Val Gly Met His Phe Val Leu Thr Leu Gly Leu
Pro Leu Ser Pro Met Pro Gly Leu Thr Arg Glu Gly Lys Leu Gly Lys
```

Trp Ile Trp Glu Met Ala Glu Gln Asp Ala Leu Pro Leu Asp Glu Ile

5011 105 Ala Arg Glu Leu Glu Cys Gln Phe Asn Arg Phe Val Asp Val Phe Gly 120 125 Arg Glu Pro Thr His Ile Asp Ser His His His Val His Met Ile Pro 135 140 Ala Ile Phe Pro Leu Val Ala Glu Phe Ala Gln Arg Lys Gly Val Ala 155 150 Met Arg Val Asp Arg Glu Val Arg Gly Leu Pro Asp Val Ala Val Thr 165 170 Ser Thr Glu Gly Phe Ser Ser Ala Phe Tyr Gly Asp Glu Ile Asp Glu 180 185 Ala Leu Phe Leu Lys Val Leu Asp Asp Ser Ala Ala Lys Gly Glu Arg 200 205 Ser Leu Glu Val Met Ala His Pro Ala Phe Val Asp Glu Ile Val Arg 215 220 Lys Ser Ala Tyr Cys Trp Pro Arg Leu Ala Glu Leu Asp Val Leu Thr 230 Ser Ala Ser Leu Lys Tyr Ala Ile Ala Glu Arg Gly Tyr Arg Leu Gly 245 Thr Phe Arg Asp Leu 260 <210> 9393 <211> 89 <212> PRT <213> Enterobacter cloacae <400> 9393 Glu Phe Ala Leu Val Asn Pro Ser Leu Met Lys Pro Leu Arg Gln Gln Asn Arg Gln Val Ile Ser Tyr Val Pro Arg Val Glu Pro Ala Pro Pro 20 25

<210> 9394 <211> 98

<212> PRT

<213> Enterobacter cloacae

<400> 9394

 Ile Met Ser Ser Gly Asp Ile Thr Arg Tyr Val Val Thr Val Asn Ile

 1
 5
 10
 15

 His Glu Ala Ser Leu Thr Glu Leu Asn Glu Leu Asn Asn Ala Phe Thr
 20
 25
 30

 Arg Ala Asn Phe Leu Leu Thr Leu Thr Asp Asp Glu Gly Asn Ile His
 35
 40
 45

 Asp Leu Gly Ser Leu Ala Phe Gly Leu Ile Ser Pro Leu Ser Gln Glu
 55
 60

 Glu Val Lys Ala Leu Ala Ser Ser Ser Leu Val Glu Ser Val Thr Asp Lys
 75
 80

 Ala Thr Glu Ile Asp Val Asp Ser Trp Glu Asn Trp His Lys Lys Glu
 90
 95

```
<210> 9395
<211> 296
<212> PRT
<213> Enterobacter cloacae
<400> 9395
Ser Gly Arg Gln His Gly Arg Asp Ile Met Trp Gln Ala Ile Ser His
Leu Leu Ser Glu Gln Leu Gly Glu Gly Glu Ile Glu Leu Arg Asn Glu
                                 25
Leu Pro Gly Gly Glu Ile His Ala Ala Trp His Leu Arg Tyr Ala Gly
Arg Asp Leu Phe Val Lys Cys Asp Glu Arg Glu Leu Leu Pro Ile Phe
                        55
Thr Ala Glu Ala Asp Gln Leu Glu Leu Leu Ser Arg Ser Lys Thr Val
Thr Val Pro Gln Val Leu Ala Val Gly Ser Asp Arg Asp Tyr Ser Phe
Leu Val Met Asn Tyr Leu Pro Ala Arg Pro Leu Asp Ala His Asn Ala
                                105
            100
                                                     110
Phe Ile Leu Gly Gln Gln Thr Ala Arg Leu His Gln Trp Ser Asp Gln
        115
                            120
                                                 125
Pro Gln Phe Gly Leu Asp Phe Asp Asn Asp Leu Ser Thr Thr Pro Gln
                        135
                                             140
Pro Asn Ala Trp Gln Arg Arg Trp Ser Thr Phe Phe Ala Glu Gln Arg
                    150
                                         155
Ile Gly Trp Gln Leu Glu Leu Ala Ala Glu Lys Gly Leu Ala Phe Gly
                                    170
                165
Asn Ile Asp Ala Ile Val Glu His Ile Gln Gln Arg Leu Ala Ser His
            180
                                185
                                                     190
Gln Pro Gln Ala Ser Leu Leu His Gly Asp Leu Trp Ser Asn Asn Cys
                                                 205
                            200
Ala Leu Gly Pro Asp Gly Pro Tyr Ile Tyr Asp Pro Ala Cys Tyr Trp
                        215
                                            220
Gly Asp Arg Glu Cys Asp Leu Ala Met Leu Pro Leu His Pro Glu Gln
                    230
                                         235
Pro Pro Gln Ile Tyr Asp Gly Tyr Gln Ser Val Ser Pro Leu Pro Ala
                245
                                    250
Gly Phe Leu Asp Arg Gln Pro Val Tyr Gln Leu Tyr Thr Leu Leu Asn
            260
                                265
Arg Ala Ile Leu Phe Gly Gly Ser His Leu Val Asn Ala Gln Arg Ala
                            280
Leu Asp Arg Ile Leu Ala Ala
    290
<210> 9396
<211> 205
<212> PRT
<213> Enterobacter cloacae
<400> 9396
Ile Asp Ser Leu Pro Gly Phe Ile Met Thr Ala Glu Gly His Leu Leu
                                     10
Phe Ser Leu Ala Cys Ala Val Phe Ala Lys Asn Ala Glu Leu Thr Pro
                                25
Val Leu Ala Gln Gly Asp Trp Trp His Ile Val Pro Ser Ala Val Leu
                            40
Thr Cys Leu Leu Pro Asp Ile Asp His Pro Lys Ser Phe Leu Gly Gln
                        55
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Arg Leu Lys Trp Ile Ser Lys Pro Ile Ala Arg Ala Phe Gly His Arg

70 75 Gly Phe Thr His Ser Leu Leu Ala Val Phe Gly Leu Leu Thr Leu Phe 90 នទ Tyr Leu Lys Val Pro Glu Ser Trp Ile Val Pro Ala Asp Ala Ile Gln 100 105 110 Gly Met Val Leu Gly Tyr Leu Ser His Ile Leu Ala Asp Met Leu Thr 120 125 Pro Ala Gly Val Pro Leu Leu Trp Pro Cys Arg Trp Arg Phe Arg Leu 135 140 Pro Ile Leu Val Pro Gln Lys Gly Asn Gln Leu Glu Arg Val Leu Cys 150 Met 'Ala Leu Phe Ala Tyr Ala Val Trp Met Pro Gln Thr Leu Pro Glu 170 Asn Gly Ala Val Arg Trp Ser Ser Gln Met Ile Asn Ser Leu Gln Phe 185 Gln Phe Asn Arg Phe Ile Asn His Gln Ile Glu His 200

<210> 9397 <211> 761

<212> PRT <213> Enterobacter cloacae

<400> 9397

Gly Phe Gln Glu Arg Thr Lys Glu Asn Arg Ala Met Ser Asn Asn Asp 10 Lys Pro His Gln Ser Pro Ile His Gly Thr Glu Glu Ser Gln Pro Gly 20 25 Met Asp Ser Leu Ala Pro Ala Asp Gly Ser His Lys Pro Ser Pro Gly 40 Leu Ser Ala Pro Gly Glu Gln Pro Thr Ala Pro Gly Ser Met Lys Ser 55 Pro Asp Ala Asp Asn Glu Lys Leu Lys Ser Leu Asp Pro His Arg Lys 70 75 Gly Gly Glu Gly Tyr Ala Leu Thr Thr Asn Gln Gly Val Arg Ile Ala 85 90 Asp Asp Gln Asn Ser Leu Arg Ala Gly Thr Arg Gly Pro Thr Leu Leu 100 105 110 Glu Asp Phe Ile Leu Arg Glu Lys Ile Thr His Phe Asp His Glu Arg 120 125 Ile Pro Glu Arg Ile Val His Ala Arg Gly Ser Ala Ala His Gly Tyr 135 140 Phe Gln Pro Tyr Lys Ser Leu Lys Glu Ile Thr Lys Ala Asp Phe Leu 150 155 Ser Asp Pro Asn Lys Ile Thr Pro Val Phe Val Arg Phe Ser Thr Val 170 Gln Gly Gly Ala Gly Ser Ala Asp Thr Val Arg Asp Ile Arg Gly Leu 185 Ala Thr Lys Phe Tyr Thr Glu Glu Gly Ile Phe Asp Leu Val Gly Asn 200 Asn Thr Pro Val Phe Phe Ile Gln Asp Ala His Lys Phe Pro Asp Phe 215 220 Val His Ala Val Lys Pro Glu Pro His Trp Ala Ile Pro Gln Gly Gln 230 235 Ser Ala His Asp Thr Phe Trp Asp Tyr Val Ser Leu Gln Pro Glu Thr 245 250 Leu His Asn Val Met Trp Ala Met Ser Asp Arg Gly Ile Pro Arg Ser 260 265 Tyr Arg Thr Met Glu Gly Phe Gly Ile His Thr Phe Arg Leu Ile Asn 280 Ala Glu Gly Lys Ala Thr Phe Val Arg Phe His Trp Lys Pro Val Ala

295 Gly Lys Ala Ser Leu Val Trp Asp Glu Ala Gln Lys Leu Thr Gly Arg 310 315 Asp Pro Asp Phe His Arg Arg Glu Leu Trp Glu Ser Ile Glu Ala Gly 325 330 Asp Phe Pro Glu Tyr Glu Leu Gly Leu Gln Leu Ile Pro Glu Glu Asp 340 345 Glu Phe Lys Phe Asp Phe Asp Leu Leu Asp Pro Thr Lys Leu Ile Pro 360 365 Glu Glu Leu Val Pro Val Gln Leu Val Gly Lys Met Val Leu Asn Arg 375 380 Asn Pro Asp Asn Phe Phe Ala Glu Asn Glu Gln Ala Ala Phe His Pro 390 395 Gly His Ile Val Pro Gly Leu Asp Phe Thr Asn Asp Pro Leu Leu Gln 410 Gly Arg Leu Phe Ser Tyr Thr Asp Thr Gln Ile Ser Arg Leu Gly Gly 420 425 Pro Asn Phe His Glu Ile Pro Ile Asn Arg Pro Thr Cys Pro Tyr His 440 445 Asn Phe Gln Arg Asp Gly Met His Arg Gln Asp Ile Asp Thr Asn Pro 455 460 Ala Asn Tyr Glu Pro Asn Ser Ile Asn Asp Asn Trp Pro Arg Glu Thr 470 475 Pro Pro Gly Pro Lys Arg Gly Gly Phe Glu Ser Tyr Gln Glu Arg Val 490 485 Asp Gly Thr Lys Ile Arg Glu Arg Ser Pro Ser Phe Gly Glu Tyr Tyr 505 500 Ala Gln Pro Arg Leu Phe Trp Asn Ser Gln Thr Pro Ile Glu Gln Gln 520 His Ile Ile Gly Gly Phe Ser Phe Glu Leu Ser Lys Val Val Arg Thr 535 540 Tyr Ile Arg Glu Arg Val Val Asp His Leu Ala His Ile Asp Ile Gln 550 555 Leu Ala Gln Gly Val Ala Asn Asn Leu Gly Ile Thr Leu Thr Asp Glu 565 570 Gln Cys His Ala Ala Pro Pro Lys Asp Val Asn Gly Leu Lys Lys Asp 585 590 Pro Ser Leu Ser Leu Tyr Ala Val Pro Gly Gly Ser Ile Lys Gly Arg 600 605 Val Val Ala Ile Leu Leu Asn Asp Lys Pro Arg Ala Ser Asp Val Leu 615 620 Gly Ile Met Arg Ala Leu Lys Thr Gln Gly Val His Ala Lys Leu Leu 630 635 Tyr Ser Arg Met Gly Glu Val Thr Ala Asp Asp Gly Ser Val Leu Pro 650 Ile Ala Ala Thr Phe Ala Gly Ala Pro Ser Leu Thr Val Asp Ala Val 665 Ile Met Pro Cys Gly Asp Val Glu Ser Leu Leu Gly Asn Gly Asp Ala 680 Ala Tyr Tyr Leu Leu Glu Ala Tyr Lys His Leu Lys Pro Ile Ala Leu 695 Ala Gly Asp Ala Arg Lys Phe Lys Thr Leu Leu Lys Val Pro Asp Gln 710 715 Gly Glu Glu Gly Ile Val Glu Gly Asp Asn Val Asp Asp Ala Phe Met 725 730 Thr Arg Leu Phe Asp Leu Leu Ala Ala His Arg Val Trp Ser Arg Ser 740 745 Ser Lys Ile Asp Gln Ile Pro Ala

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<211> 317
<212> PRT
<213> Enterobacter cloacae
<400> 9398
Pro Pro Pro Gly Ser Phe Leu Thr Thr Glu His Leu Leu His Cys Met
                                    10
Pro Glu Gln Tyr Met Glu Gln Tyr Val Ser Arg Arg Gln Ser Ala Pro
Arg Leu Glu Phe Glu Ala Ala Ala Ile Tyr Glu Tyr Pro Glu His Leu
Arg Pro Trp Leu Glu Ala Leu Pro Lys Gln Pro Gly Val Tyr Phe Phe
His Gly Asp Ser Asp Thr Met Pro Leu Tyr Ile Gly Lys Ser Val Asn
                    70
                                        75
Ile Arg Ser Arg Val Met Ser His Leu Arg Thr Pro Asp Glu Ala Ser
                                    90
                85
Met Leu Arg Gln Ser Arg Arg Ile Thr Trp Ile Glu Thr Ala Gly Glu
            100
                                105
                                                    110
Leu Gly Ala Leu Leu Glu Ala Arg Leu Ile Lys Glu Gln Gln Pro
                                                125
        115
                            120
Leu Phe Asn Lys Arg Leu Arg Arg Asn Arg Gln Leu Cys Ser Leu Gln
                       135
                                            140
Val Asn Ala Gly Lys Pro Gln Val Val Tyr Ala Arg Glu Val Asp Phe
                    150
                                        155
Ser His Glu Pro Asn Leu Tyr Gly Leu Phe Ala Asn Lys Arg Ala Ala
               165
                                    170
Leu Gln Thr Leu Gln Ser Leu Ala Asp Glu Leu Gln Leu Cys Tyr Gly
                                                    190
           180
                               185
Leu Leu Gly Leu Glu Ala Thr Thr Arg Gly Arg Ala Cys Phe Arg Ser
                            200
                                                205
Ala Leu Lys Arg Cys Ala Gly Ala Cys Cys Gly Lys Glu Ser Val Glu
                       215
                                            220
Glu His His Ala Arg Phe Met Ala Gly Leu Ala Ser Ile Ser Val Asn
                    230
                                        235
Cys Trp Pro Trp Glu Gly Ala Val Ala Leu Lys Glu Thr Arg Asp Ala
               245
                                    250
Met Thr His Tyr His Ile Ile Arg Asn Trp Leu Trp Leu Gly Ala Val
                                265
                                                    270
Glu Ser Leu Asp Asp Ala Thr Ala Leu Leu Arg Thr Pro Ala Gly Phe
                            280
                                                285
Asp Gln Asp Gly Tyr Lys Ile Leu Cys Lys Pro Leu Leu Thr Gly Lys
                       295
Tyr Glu Ile Ile Val Leu Ser Asp Pro Ala Ala Arg
                    310
<210> 9399
<211> 161
<212> PRT
<213> Enterobacter cloacae
<400> 9399
Pro Val Ser Arg Pro Pro Cys Thr Arg Phe Ser Thr Pro Gly Gly Ser
                                    10
Pro Ala Cys Ser Gln Ser Phe Thr Thr Ala Ser Pro Val Lys Gly Val
                                25
Asn Ser Leu Gly Leu Lys Met Thr Val Phe Pro Ala Ser Ser Ala Gly
                            40
                                                45
Thr Met Cys Pro Phe Gly Arg Cys Pro Gly Lys Leu Tyr Gly Pro Asn
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Thr Ala Ser Thr Pro Cys Gly Arg Trp Arg Ser Val Ala Ala Pro Ser

70 75 Gly Ile Ser Val Cys Cys Ser Pro Val Arg Val Trp Tyr Ala Phe Thr 90 85 Asp Ile Ala Ile Leu Leu Ile Ile Ala Val Thr Ser Val Val Ala Ser 100 105 110 Gln Arg Gly Leu Leu Val Ser Gln Ala Met Met Arg Val Ser Ser Ala 115 120 Leu Leu Ala Ser Ser Ser Ala Ala Asn Phe Ser Thr Ser Ala Trp Arg 135 140 Ser Glu Asn Gly Arg Phe Ala His Ala Gly Asn Ala Arg Arg Ala Ala 150 155

<210> 9400 <211> 515 <212> PRT <213> Enterobacter cloacae

<400> 9400 Arg Pro Gly Ala Gly Met Ala Ser Pro Leu Arg Asn Pro Leu Ser Gly 10 Leu Val Trp Ala Ala Met Ala Val Ile Tyr Leu Pro Leu Leu Pro Ala 20 25 Ser Gly Met Leu Leu Ala Pro Ala Phe Ser Pro Gly Asn Trp Ala Thr 40 45 Leu Phe Ala Asp Pro Gln Leu Pro Gln Ala Leu Ala Ala Thr Leu Val 55 Ser Ala Leu Ile Ala Thr Leu Gly Ser Leu Phe Ile Ala Leu Thr Leu 70 75 Leu Ala Leu Leu Trp Pro Gly Glu Gly Trp Gln Arg Leu Ser Thr Arg 85 90 Leu Pro Trp Leu Leu Ala Val Pro His Val Ala Phe Ala Thr Ser Ala 100 105 Leu Leu Phe Ala Glu Gly Gly Gln Phe Tyr Arg Ile Cys Thr Val 120 125 Cys Ser Pro Gln Leu Asp Arg Tyr Gly Ile Gly Leu Gly Leu Thr Leu 135 140 Ala Val Lys Glu Ser Ala Phe Val Leu Trp Thr Ile Tyr Ala Ala Leu 150 155 Pro Glu Lys Arg Leu Val Gln Gln Lys Ile Val Leu His Thr Phe Gly 165 170 Tyr Gly Arg Met Gln Ala Leu Asn Trp Leu Ile Leu Pro Ala Ile Ala 185 190 Pro Ala Leu Gly Ala Val Met Leu Ala Val Leu Ala Trp Ser Leu Ser 200 205 Val Val Asp Val Ala Ile Val Leu Gly Pro Gly Asn Pro Pro Thr Leu 215 220 Ala Val Leu Ala Trp Gln Trp Leu Thr Gln Gly Asp Ala Gln Gln Gln 230 235 Thr Lys Gly Thr Leu Leu Cys Leu Val Leu Leu Leu Leu Ala Ala 250 245 Leu Ala Ala Val Gly Tyr Gly Phe Trp Thr Ala Trp Arg Arg Ala Gln 265 Pro Ala Pro Ser Gly Val Arg Arg Ala Ser His Ser Ala Leu Pro Ala 280 285 Arg Thr Leu Gly Gly Leu Leu Pro Leu Cys Gly Val Leu Cys Ala Leu 295 300 Val Leu Leu Met Leu Ala Arg Arg Asp Asp Ile Gly Pro Val Ser Asp . 310 315 Ser Leu Ser Leu Gly Leu Leu Ser Ser Leu Thr Ala Leu Ala Ile Leu

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330
Met Ile Trp Leu Glu Trp Gly Pro Gln Arg Gly Ala Val Trp Ile Trp
                                345
Leu Pro Leu Ala Leu Pro Ala Leu Pro Leu Val Ser Gly Gln Tyr Ala
                            360
                                                365
Val Ala Leu Trp Leu Gly Ile Asp Gly Gln Tyr Ala Ala Val Leu Trp
                        375
                                            380
Ser His Met Leu Trp Val Leu Pro Trp Met Leu Leu Val Leu Gln Pro
                    390
                                        395
Ala Trp Arg Arg Leu Asp Pro Arg Leu Ile Leu Thr Ala Arg Thr Leu
                405
                                    410
Gly Trp Arg Arg Ala Lys Ile Phe Trp Leu Val Lys Cys Pro Leu Met
            420
                                425
Val Arg Pro Ala Leu Leu Ala Phe Ala Thr Gly Phe Ser Val Ser Met
                            440
Ala Gln Tyr Met Pro Thr Leu Trp Leu Gly Ala Gly Arg Phe Thr Thr
                        455
Leu Thr Thr Glu Ala Val Ala Leu Ser Ser Gly Gly Ser Ile Pro Ile
                    470
                                        475
Leu Ala Ser Arg Ala Leu Gly Leu Leu Leu Leu Thr Ser Ser Val Phe
                485
                                    490
Ala Leu Ala Ala Leu Leu Ser Arg Leu Val Gly Arg His Arg Gln Gly
Leu Arg
        515
<210> 9401
<211> 468
<212> PRT
<213> Enterobacter cloacae
<400> 9401
Leu Arg Phe Leu Ala Gly Asn Asn Val Leu Thr Gln Cys Phe Trp Leu
                                    10
Gln Glu Arg Arg Gln Cys Pro Pro Leu Leu Met Thr Ser Gly Phe Ser
            20
                                25
Met Lys Arg Val Ser Gln Leu Thr Ala Leu Ala Leu Ile Cys Gly Leu
                            40
Ala Ser Leu Ser Ser Thr Ala Ala Asp Met Pro His Ser Leu Thr Leu
                        55
                                            60
Ala Gln Leu Gln Thr Gln Asn Gly Ala Val Ile Asp Thr Arg Ile Ser
                   70
                                        75
Ala Phe Tyr Asn Gly Trp Pro Gln Thr Leu Ser Gly Thr Ser Gly His
               85
                                    90
Glu Pro Ala Ala Leu Asn Leu Ser Ala Ser Trp Leu Gly Ala Met Ser
                                105
Asp Glu Gln Leu Ser Gly Trp Ala Lys Gln His Arg Leu Thr Pro Asp
                            120
Met Pro Val Ala Leu Tyr Gly Asn Asp Asn Asp Asn Gln Thr Val Lys
                        135
                                            140
Thr Arg Leu Glu Lys Ala Gly Phe Thr His Val Ser Thr Leu Ser Asp
                    150
                                        155
Ala Leu Gln Gln Ser Asp Arg Leu Gln Arg Leu Ala His Phe Glu Gln
                                    170
                165
Leu Val Tyr Pro Gln Trp Ile Arg Gln Leu Gln Gly Lys Pro Val
                                185
                                                    190
Thr Ala Ala Pro Ala Gly Glu Trp Lys Val Ile Glu Ala Gly Trp Gly
                            200
Thr Pro Lys Leu Tyr Leu Leu Ser His Ile Pro Asp Ala Gly Tyr Ile
                        215
                                            220
```

Asp Thr Asn Glu Val Glu Ser Glu Pro Leu Trp Asn Lys Val Ser Asp

```
230
                                         235
Glu Lys Leu Lys Ala Met Leu Ala Lys His Gly Ile Arg His Asp Thr
                245
                                    250
Thr Val Ile Leu Tyr Gly Arg Asp Val Tyr Ala Ala Ala Arg Val Ala
            260
                                265
Gln Ile Met Leu Tyr Ala Gly Val Arg Asp Val Arg Ile Leu Asp Gly
                            280
Gly Trp Lys Ala Trp Ser Asp Ala Ser Leu Pro Val Glu Arg Gly Thr
                                             300
                        295
Pro Ala Asn Val Lys Pro Ala Pro Asp Phe Gly Ala Pro Ile Pro Gly
                    310
                                         315
Gln Pro Gln Leu Met Val Asp Met Glu Gln Ala Arg Gly Met Leu His
                325
                                     330
Arg Gln Asp Ala Ser Leu Val Ser Ile Arg Ser Trp Pro Glu Phe Ile
            340
                                345
Gly Glu Thr Ser Gly Tyr Ser Tyr Ile Lys Pro Lys Gly Glu Ile Ala
                            360
Gly Ala Arg Trp Gly His Ala Gly Ser Asp Ala Thr His Met Glu Asp
                        375
Phe His Asn Pro Asp Gly Thr Met Arg Ser Ala Asp Asp Ile Ala Ala
                    390
Met Trp Lys Thr Trp Asn Ile Leu Pro Glu Gln His Val Ala Phe Tyr
                                     410
Cys Gly Thr Gly Trp Arg Ala Ser Glu Ala Phe Met Tyr Ala Arg Ala
            420
                                425
Met Gly Trp Gln Asn Val Ala Val Tyr Asp Gly Gly Trp Tyr Glu Trp
                            440
Ser Ser His Pro Gln Asn Pro Val Ser Thr Gly Glu Arg Gly Pro Glu
Ser Ala Arg
465
<210> 9402
<211> 143
<212> PRT
<213> Enterobacter cloacae
<400> 9402
Leu Leu Thr Asn Met Leu Lys Thr Leu Asp Val Val Ala Ala Ile Leu
                                    10
Glu Asn Glu Gly Lys Ile Leu Leu Ala Gln Arg Pro Glu His Ala Asp
            20
                                25
Gln Pro Gly Met Trp Glu Phe Ala Gly Gly Lys Val Glu Ala Gly Glu
                            40
                                                 45
Thr Gln Pro Glu Ala Leu Ile Arg Glu Leu Arg Glu Glu Leu Gly Ile
                        55
                                             60
Glu Ala Val Pro Ala Arg Tyr Val Ala Ser His Gln Arg Glu Val Ser
                    70
                                        75
Gln Arg Leu Ile His Leu His Ala Trp His Val Pro Glu Phe Ser Gly
                85
                                    90
Glu Leu Lys Ala His Tyr His Ser Ala Leu Val Trp Cys Thr Pro Glu
                                105
Asp Ala Phe Thr Tyr Asp Leu Ala Pro Ala Asp Ile Pro Leu Leu Glu
                            120
Ala Phe Ile Leu Leu Arg Asp Ala Arg Pro Ala Gly Leu Tyr
                        135
<210> 9403
<211> 308
<212> PRT
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<213> Enterobacter cloacae

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<400> 9403
Arg Ile Asp Cys Pro Pro Ser Ala Trp Gly Val Thr Leu Phe Gln Ala
                                    10
Ala Ser Ala Ala Cys Pro Ala Lys Ser Lys Gln Arg Phe Thr Leu Phe
Ala Phe Leu Ile Pro Asp Ser Tyr Ser Tyr Val Gln Asn Asp Asn Asn
                            40
Leu Thr Ser Glu Ala Arg Met Ile Leu Asp Ala Phe Thr Leu Ala Gly
                        55
Lys Val Ala Met Val Thr Gly Cys Asp Thr Gly Leu Gly Gln Gly Met
                    70
Ala Ile Ala Leu Ala Glu Ala Gly Cys Asp Ile Val Gly Val Asn Arg
                                    90
Lys Val Pro Asp Glu Thr Ala Ala Arg Val Thr Ala Leu Gly Arg Arg
            100
                                105
Phe Ile Ala Ile Arg Ala Asp Leu Gly Lys Gln Glu Ser Ile Gln Ser
                            120
Val Val Asp Thr Ala Val Ala Glu Met Gly Arg Ile Asp Ile Leu Val
                        135
Asn Asn Ala Gly Thr Ile Arg Arg Ala Asp Ala Leu Glu Phe Ser Glu
                    150
                                        155
Lys Asp Trp Asp Glu Val Ile Asp Leu Asn Leu Lys Ser Val Phe Phe
               165
                                    170
Leu Ser Gln Ala Val Ala Lys Gln Phe Ile Ala Gln Gly Gln Gly Gly
            180
                                185
Lys Ile Ile Asn Ile Ala Ser Met Leu Ser Phe Gln Gly Gly Ile Arg
       195
                            200
Val Pro Ser Tyr Thr Ala Ser Lys Ser Gly Val Leu Gly Leu Thr Arg
                        215
                                            220
Leu Leu Ala Asn Glu Trp Ala Thr Leu Gly Ile Asn Val Asn Ala Ile
                    230
                                        235
Ala Pro Gly Tyr Met Val Thr Asn Asn Thr Arg Gln Leu Arg Asp Asp
                245
                                    250
Glu Gln Arg Ser Gln Ala Ile Leu Asp Arg Ile Pro Ala Gly Arg Trp
            260
                                265
                                                    270
Gly Leu Pro Glu Asp Leu Gln Gly Pro Val Val Phe Leu Ala Ser Arg
                           280
Ala Ser Asp Tyr Val Asn Gly His Thr Leu Ala Val Asp Gly Gly Trp
   290
                        295
                                            300
Leu Ala Arg
305
<210> 9404
<211> 469
<212> PRT
<213> Enterobacter cloacae
<400> 9404
Ile Arg Arg Thr Gly Met Asn Phe Pro Leu Ile Ala Asn Ile Val Val
Phe Val Val Leu Leu Leu Leu Ala Gln Ala Arg His Lys Gln Trp
Ser Leu Ala Lys Lys Val Leu Val Gly Leu Val Met Gly Val Val Phe
Gly Leu Ala Leu His Ala Ile Tyr Gly Ser Asp Ser Pro Val Leu Lys
                        55
Asp Ser Ile Gln Trp Phe Asn Ile Val Gly Asn Gly Tyr Val Gln Leu
                   70
Leu Gln Met Ile Val Met Pro Leu Val Phe Ala Ser Ile Leu Ser Ala
```

```
Val Ala Arg Leu His Asn Ala Ser Gln Leu Gly Lys Ile Ser Phe Leu
            100
                                105
Thr Ile Gly Thr Leu Leu Phe Thr Thr Leu Ile Ala Ala Leu Val Gly
        115
                            120
Val Leu Val Thr Asn Leu Phe Gly Leu Thr Ala Glu Gly Leu Val Gln
                        135
                                            140
Gly Ser Ala Glu Thr Ala Arg Leu Thr Ala Ile Glu Thr Asn Tyr Val
                    150
                                        155
Gly Lys Val Ala Asp Leu Thr Val Pro Gln Met Val Leu Ser Phe Ile
                                    170
                165
Pro Lys Asn Pro Phe Ala Asp Leu Thr Gly Ala Ser Pro Thr Ser Ile
            180
                                185
Ile Ser Val Val Ile Phe Ala Ala Phe Leu Gly Val Ala Ala Leu Lys
                            200
Leu Leu Lys Asp Asp Ala Pro Lys Gly Glu Arg Val Leu Thr Ala Ile
                        215
                                            220
Asp Thr Leu Gln Ser Trp Val Met Lys Leu Val Arg Leu Val Met Gln
                    230
                                        235
Leu Thr Pro Tyr Gly Val Leu Ala Leu Met Thr Lys Val Val Ala Gly
                                    250
Ser Asn Leu Gln Asp Ile Ile Lys Leu Gly Ser Phe Val Ile Ala Ser
Tyr Leu Gly Leu Gly Ile Met Phe Val Val His Gly Ile Leu Leu Gly
                            280
Val Asn Gly Val Gly Pro Leu Lys Tyr Phe Arg Lys Val Trp Pro Val
                        295
                                            300
Leu Thr Phe Ala Phe Thr Ser Arg Ser Ser Ala Ala Ser Ile Pro Leu
                    310
                                        315
Asn Val Glu Ala Gln Thr Arg Arg Leu Gly Val Pro Glu Ser Ile Ala
                325
                                    330
Ser Phe Ser Ala Ser Phe Gly Ala Thr Ile Gly Gln Asn Gly Cys Ala
                                345
Gly Leu Tyr Pro Ala Met Leu Ala Val Met Val Ala Pro Thr Val Gly
       355
                            360
Ile Asn Pro Leu Asp Pro Val Trp Ile Ala Thr Leu Val Gly Ile Val
                        375
Thr Ile Ser Ser Ala Gly Val Ala Gly Val Gly Gly Ala Thr Phe
                   390
                                        395
Ala Ala Leu Ile Val Leu Pro Ala Leu Gly Leu Pro Val Thr Leu Val
                                    410
               405
Ala Leu Leu Ile Ser Val Glu Pro Leu Ile Asp Met Gly Arg Thr Ala
                                425
           420
Leu Asn Val Ser Gly Ser Met Thr Ala Gly Thr Leu Thr Ser Gln Trp
                            440
                                                445
Leu Lys Gln Thr Asp Lys Thr Ile Leu Asp Ser Glu Asp Asp Ala Glu
                       455
   450
Leu Ala His Arg
465
<210> 9405
<211> 294
<212> PRT
<213> Enterobacter cloacae
<400> 9405
Leu Gly Glu Ala Asp Asn Arg Arg Lys Phe Cys Tyr His Pro Cys
```

Thr Ile His Leu Ala Leu Ala Ala Thr Met Lys Phe Val Ser Phe Asn 20 25 30 Ile Asn Gly Leu Arg Ala Arg Pro His Gln Leu Glu Ala Ile Val Glu 35 40

```
Gln His Gln Pro Asp Val Ile Gly Leu Gln Glu Thr Lys Val His Asp
Asp Met Phe Pro Leu Glu Glu Val Ala Lys Leu Gly Tyr Asn Val Phe
                                        75
Tyr His Gly Gln Lys Gly His Tyr Gly Val Ala Leu Leu Thr Lys Asp
                85
Thr Pro Val Ser Val Arg Arg Gly Phe Pro Gly Asp Gly Glu Glu Ala
                                105
Gln Arg Arg Ile Ile Met Ala Glu Ile Pro Ser Ala Leu Gly Asn Val
                            120
        115
Thr Val Ile Asn Gly Tyr Phe Pro Gln Gly Glu Ser Arg Asp His Glu
                        135
Thr Lys Phe Pro Ala Lys Ala Lys Phe Tyr Gln Asp Leu Gln Asn Tyr
                    150
                                        155
Leu Thr Thr Glu Leu Lys Lys Glu Asn Pro Val Leu Ile Met Gly Asp
                165
                                    170
Met Asn Ile Ser Pro Thr Asp Leu Asp Ile Gly Ile Gly Glu Glu Asn
                                185
Arg Lys Arg Trp Leu Arg Thr Gly Lys Cys Ser Phe Leu Pro Glu Glu
                            200
Arg Glu Trp Met Glu Arg Leu Leu Gly Trp Gly Leu Val Asp Thr Phe
                        215
Arg Thr Ala Asn Pro Glu Thr Gln Asp Arg Phe Ser Trp Phe Asp Tyr
                    230
                                        235
Arg Ser Lys Gly Phe Asp Asp Asn Arg Gly Leu Arg Ile Asp Leu Leu
                245
                                    250
Leu Ala Ser Ala Pro Leu Ala Glu Arg Cys Ile Glu Thr Gly Ile Asp
                                265
Tyr Asp Ile Arg Ser Met Glu Lys Pro Ser Asp His Ala Pro Val Trp
        275
                            280
Ala Thr Phe Lys Leu
   290
<210> 9406
<211> 230
<212> PRT
<213> Enterobacter cloacae
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<400> 9406

Thr Ser Val Asn Ile Lys Lys Ile Ser Leu Leu Cys Ala Leu Leu Gly 10 Ala Phe Val Leu Ile Val Val Leu Leu Pro Pro Gly Met Leu Ser Leu 25 Asp Thr Leu Lys Ile His Gln Gln Thr Leu Leu Ala Arg Val Glu Gln 40 Ala Pro Leu Gln Ser Ala Leu Phe Tyr Phe Ala Val Tyr Val Leu Leu 55 Ser Ala Leu Ser Ile Pro Gly Ala Ala Leu Leu Thr Leu Leu Gly Gly 70 75 Ala Leu Phe Ser Leu Trp Glu Ala Thr Leu Leu Val Ser Phe Ala Ser 90 Thr Leu Gly Ala Thr Leu Ala Met Leu Val Ser Arg Tyr Leu Leu Arg 105 Asp Trp Val Gln Arg Arg Phe Ala Ala Gln Met Asn Thr Ile Asp Ala 120 Gly Met Asp Arg Asp Gly Ala Arg Tyr Leu Phe Ala Leu Arg Leu Met 135 140 Pro Leu Phe Pro Phe Phe Leu Val Asn Leu Leu Met Gly Leu Thr Arg 150 155 Leu Arg Val Arg His Tyr Trp Trp Val Ser Gln Leu Ala Met Leu Pro 170

Ala Thr Val Ile Tyr Leu Asn Ala Gly Arg Glu Leu Gly Lys Leu Thr 185 180 Ser Leu Arg Asp Ile Leu Ser Pro Gly Leu Leu Phe Ala Phe Thr Leu 195 200 205 Leu Gly Leu Pro Leu Val Thr Arg Trp Leu Phe Ser Arg Tyr Ile 210 215 Pro Ser Ile Lys Lys 230 225 <210> 9407 <211> 392 <212> PRT <213> Enterobacter cloacae <400> 9407 Gly Ile Met Arg Arg Val Arg Phe Cys Ala Phe Leu Thr Ser Leu Leu Leu Ala Thr Ser Ala Phe Ala Ala Glu Ser Trp Gln Ser Ile Gln Gln 25 Gln Ala Thr Gly Gln Thr Val Trp Phe Asn Ala Trp Gly Gly Asp Glu 40 4.5 Ala Val Asn Arg Tyr Leu Asp Trp Val Ser Gly Glu Met Lys Thr His 55 Tyr Ala Ile Asn Leu Lys Ile Val His Leu Ala Asp Ala Ala Asp Ala 70 75 Val Lys Arg Ile Gln Thr Glu His Ala Ala Gly Arg Ser Ser Asn Gly 8.5 90 . Ser Val Asp Leu Leu Trp Val Asn Gly Glu Asn Phe Arg Asn Leu Lys 100 105 Ala Ala Asn Leu Leu Thr Gly Trp Ala Gln Thr Leu Pro Asn Trp 125 115 120 Arg Tyr Val Asp Thr Arg Lys Pro Val Thr Glu Asp Phe Ala Ile Pro 135 140 Thr Asp Gly Ala Glu Ser Pro Trp Gly Gly Ala Gln Leu Thr Phe Ile 150 155 Ala Arg Lys Ala Ser Thr Pro Thr Pro Pro Ala Asp Pro His Ala Leu 165 170 Leu Val Tyr Ala Arg Gln His Pro Gly Lys Val Ser Tyr Pro Arg Pro 180 185 190 Pro Asp Phe Thr Gly Thr Ala Phe Leu Glu Gln Leu Leu Leu Ala Leu 200 Thr Ala His Pro Glu Ala Leu Lys Asn Ala Pro Asp Ser Thr Phe Ala 215 220 Gln Val Thr Ala Pro Leu Trp Asp Tyr Leu Asp Thr Leu His Pro Leu 230 235 Leu Trp Arg Glu Gly Asn Asp Phe Pro Pro Ser Pro Ala Arg Met Asp 245 250 Thr Leu Leu Ala Ser Gly Ser Leu Asn Leu Ser Leu Thr Phe Asn Pro 265 Ala His Ala Met Gln Lys Val Ala Ser Gly Glu Leu Pro Ala Asp Ser 280 Tyr Ser Phe Gly Phe Leu Lys Gly Met Ile Gly Asn Val His Phe Val 295 300 Ala Ile Pro Ala Asn Ala Ser Ala Ser Ala Gly Ala Lys Val Val Ala 310 315 Asn Phe Leu Leu Ser Pro Gln Ala Gln Ile Arg Lys Ala Asn Pro Ala 325 330 Val Trp Gly Asp Pro Ser Val Leu Asp Gly Glu Lys Leu Pro Ala Lys 340 345 350 Ala Ala Lys Gln Leu Arg Ala Phe Thr Pro Ser Gly Thr Pro Asp Val

360

Leu Pro Glu Pro His Ala Ala Trp Val Asn Ala Leu Glu Gln Glu Trp 375 380 Leu Arg Arg Tyr Gly Thr Arg 385 390 <210> 9408 <211> 453 <212> PRT <213> Enterobacter cloacae <400> 9408 Glu Val Leu Ile Ser Met Asp Gln Thr Arg Ser Leu Glu Ser Phe Leu 1 10 Ala His Val Gln Gln Arg Asp Pro His Gln Ser Glu Phe Ala Gln Ala 20 25 Val Arg Glu Val Met Thr Thr Leu Trp Pro Phe Leu Glu Glu Asn Pro 45 40 Arg Tyr Arg Gln Met Ala Leu Leu Glu Arg Leu Val Glu Pro Glu Arg 55 Val Ile Gln Phe Arg Val Ala Trp Val Asp Asp Arg Asn Gln Val Gln 70 75 Val Asn Arg Ala Trp Arg Val Gln Phe Asn Ser Ala Ile Gly Pro Phe 90 85 Lys Gly Gly Met Arg Phe His Pro Ser Val Asn Leu Ser Ile Leu Lys 105 100 Phe Leu Gly Phe Glu Gln Thr Phe Lys Asn Ala Leu Thr Thr Leu Pro 115 120 125 Met Gly Gly Lys Gly Gly Ser Asp Phe Asp Pro Lys Gly Lys Ser 135 140 Glu Gly Glu Val Met Arg Phe Cys Gln Ala Leu Val Thr Glu Leu Tyr 155 150 Arg His Leu Gly Pro Asp Thr Asp Val Pro Ala Gly Asp Ile Gly Val 175 165 170 Gly Gly Arg Glu Val Gly Phe Met Ala Gly Met Met Lys Lys Leu Ser 180 185 190 Asn Asn Ser Ala Cys Val Phe Thr Gly Lys Gly Leu Ser Phe Gly Gly 200 205 Ser Leu Ile Arg Pro Glu Ala Thr Gly Tyr Gly Leu Val Tyr Phe Thr 215 220 Glu Ala Met Leu Lys Arg His Gly Leu Ser Phe Glu Gly Met Arg Val 230 235 Ala Val Ser Gly Ser Gly Asn Val Ala Gln Tyr Ala Ile Glu Lys Ala 245 250 Met Ala Phe Gly Ala Arg Val Val Thr Ala Ser Asp Ser Ser Gly Thr 265 Val Val Asp Glu Ala Gly Phe Thr Ala Glu Lys Leu Ala Arg Leu Cys 280 Glu Ile Lys Ala Ser Arg Asp Gly Arg Val Ala Asp Tyr Ala Arg Glu 295 Phe Gly Leu Thr Tyr Leu Glu Gly Lys Gln Pro Trp Gly Val Pro Val 310 315 Asp Ile Ala Leu Pro Cys Ala Thr Gln Asn Glu Leu Asp Val Asp Ala 325 330 Ala Arg Thr Leu Ile Ser Asn Gly Val Lys Ala Val Ala Glu Gly Ala 340 345 Asn Met Pro Thr Thr Ile Asp Ala Thr Asp Leu Phe Leu Asp Ala Gly 355 360 365 Val Leu Phe Ala Pro Gly Lys Ala Ala Asn Ala Gly Gly Val Ala Thr 375 380 Ser Gly Leu Glu Met Ala Gln Asn Ala Ala Arg Met Ser Trp Lys Ala

390

Glu Lys Val Asp Ala Arg Leu His His Ile Met Leu Asp Ile His His Ala Cys Val Glu Tyr Gly Gly Glu Ala Ser Gln Thr Asn Tyr Val Arg 420 425 430

Gly Ala Asn Ile Ala Gly Phe Val Lys Val Ala Asp Ala Met Ile Gly 435 440 445 .

Gln Gly Val Ile 450

<210> 9409 <211> 376 <212> PRT

<213> Enterobacter cloacae

<400> 9409 Ser Thr Glu Pro Leu Arg Val Leu Pro Asp Leu Arg Glu Arg Ala Leu Lys Thr Val Pro Ser Ser Arg Glu Glu Gly Ile Phe Ser Phe Glu Glu Gln Glu Leu Ile Thr Met Gln Lys Lys Ser Ile Tyr Val Ala Tyr Thr 40 Gly Gly Thr Ile Gly Met Gln Arg Ser Glu Asn Gly Tyr Ile Pro Val 55 Ser Gly His Leu Gln Arg Gln Leu Ala Leu Met Pro Glu Phe His Arg 70 75 Pro Glu Met Pro Asp Phe Thr Ile His Glu Tyr Glu Pro Leu Met Asp 85 90 Ser Ser Asp Met Thr Pro Glu Asp Trp Gln His Ile Ala Asp Asp Ile 100 105 Lys Ala His Tyr Asp Gln Tyr Asp Gly Phe Val Ile Leu His Gly Thr 115 120 125 Asp Thr Met Ala Phe Thr Ala Ser Ala Leu Ser Phe Met Leu Glu Asn 135 140 Leu Ser Lys Pro Val Ile Val Thr Gly Ser Gln Ile Pro Leu Ala Glu 150 155 Leu Arg Ser Asp Gly Gln Ile Asn Leu Leu Asn Ser Leu Tyr Val Ala 165 170 Ala Asn Tyr Pro Ile Asn Glu Val Thr Leu Phe Phe Asn Asn Arg Leu 180 185 Tyr Arg Gly Asn Arg Thr Thr Lys Ala His Ala Asp Gly Phe Asp Ala 195 200 205 Phe Ala Ser Pro Asn Leu Gln Pro Leu Leu Glu Ala Gly Ile His Ile

215 220 Arg Arg Leu Gly Thr Pro Pro Ala Pro Asn Thr Ala Gly Glu Leu Ile 230 235 Val His Pro Ile Thr Pro Gln Pro Ile Gly Val Val Thr Ile Tyr Pro 245 250 Gly Ile Ser Ala Asp Val Val Arg Asn Phe Leu Arg Gln Pro Val Lys 265 Ala Leu Ile Leu Arg Ser Tyr Gly Val Gly Asn Ala Pro Gln Asn Gly 280 Glu Phe Leu Lys Glu Leu Gln Glu Ala Ser Asp Arg Gly Ile Val Val 295 Val Asn Leu Thr Gln Cys Met Ser Gly Lys Val Asn Met Gly Gly Tyr 310 315 Ala Thr Gly Asn Ala Leu Ala His Ala Gly Val Ile Ser Gly Phe Asp 330 325 Met Thr Val Glu Ala Thr Leu Thr Lys Leu His Tyr Leu Leu Ser Gln 345 350

Asp Leu Asp Ile Asp Ser Ile Arg Arg Ala Met Met Gln Asn Leu Arg
355
360
365

```
Gly Glu Leu Thr Pro Asp Glu
    370
<210> 9410
<211> 217
<212> PRT
<213> Enterobacter cloacae
<400> 9410
Gly Asp Pro Met Lys Gln Arg Ala Leu Leu Leu Val Asp Leu Gln Asn
Asp Phe Cys Ala Gly Gly Ala Leu Ala Val Ala Glu Gly Asp Ser Thr
Val Asp Val Ala Asn Ser Leu Ile Ala Trp Cys Lys Ala Arg Gly Glu
Ala Val Val Ala Ser Gln Asp Trp His Pro Ala Asn His Gly Ser Phe
Ala Ser Gln His Asn Val Glu Pro Phe Ser Gln Gly Glu Leu Asp Gly
                    70
                                        75
Leu Ala Gln Thr Phe Trp Pro Asp His Cys Val Gln Gln Thr Glu Gly
                                    90
                8.5
Ala Glu Leu His Pro Leu Leu Asn Gln Lys Ala Ile Asp Ala Val Phe
            100
                                105
His Lys Gly Glu Asn Pro Thr Ile Asp Ser Tyr Ser Ala Phe Phe Asp
        115
                            120
Asn Gly His Arg Gln Lys Thr Ala Leu Asp Ala Trp Leu Arg His His
                        135
                                            140
Glu Ile Thr Glu Leu Ile Val Leu Gly Leu Ala Thr Asp Tyr Cys Val
                   150
                                        155
Lys Phe Thr Val Leu Asp Ala Leu Gln Leu Gly Tyr Thr Val Asn Val
                                    170
                165
Ile Thr Asp Gly Cys Arg Gly Val Asn Ile Gln Pro Gln Asp Ser Ala
                               185
            180
Gln Ala Phe Met Asp Met Ala Ala Glu Gly Ala Thr Leu Tyr Thr Leu
                            200
Ala Asp Trp Met Glu Thr Gln Ala
    210
<210> 9411
<211> 455
<212> PRT
<213> Enterobacter cloacae
<400> 9411
Thr Pro Ser His His Lys Arg Asn Gly Asp Ala Ile Leu Ser Arg Leu
Phe Phe Arg His Ala Phe Ser Val Ala Trp Leu Phe Leu Phe Ser Gln
Arg Gly Asn Tyr Met Lys Arg Leu Pro Leu Leu Ala Ala Leu Pro Leu
                            40
Leu Cys Ala Ser Leu Ala Ser Ala Ala Pro Leu Met Ser Val Gly Tyr
Phe Asn Gly Gly Gly Asp Val Thr Ala Gly Pro Gly Gly Asp Ile His
                    70
Lys Leu Asp Val Arg Gln Ile Thr His Leu Asn Tyr Ser Phe Gly Leu
                                    90
Val Tyr Asn Asn Glu Lys Asp Glu Thr Asn Ala Ala Leu Lys Asp Pro
                                105
Ala Lys Leu His Gln Ile Trp Leu Ser Pro Lys Val Ala Ser Asp Leu
```

115 120 125 Ala Leu Leu Pro Gln Leu Arg Lys Gln Asn Pro Asn Leu Lys Val Leu

```
135
Leu Ser Val Gly Gly Trp Gly Ala Arg Gly Phe Ser Gly Ala Ala Ala
                    150
                                        155
Thr Lys Glu Ser Arg Ala Val Phe Ile Arg Ser Ala Gln Glu Ile Val
                                    170
                165
Ser Gln Tyr Gly Leu Asp Gly Ile Asp Leu Asp Trp Glu Phe Pro Val
            180
                                185
Asn Gly Ala Trp Gly Leu Val Glu Ser Thr Pro Ala Asp Arg Asp Asn
                            200
                                                 205
Phe Thr Ala Leu Leu Lys Glu Met Arg Asp Ala Phe Gly Lys Lys
                        215
Leu Val Thr Ile Ala Val Gly Ala Asn Ala Glu Ser Pro Lys Ser Trp
                    230
Val Asp Val Lys Ala Ile Ala Pro Leu Leu Asp Tyr Ile Asn Leu Met
                                    250
Thr Tyr Asp Met Ala Tyr Gly Thr Gln Tyr Phe Asn Ala Asn Leu Tyr
                                265
Asp Ser Ser Asp Trp Pro Thr Val Ala Ala Ala Asp Lys Tyr Ser Val
        275
                            280
                                                285
Asp Phe Val Val Asn Asn Tyr Leu Ala Ala Gly Leu Lys Pro Gln Gln
                        295
                                            300
Met Asn Leu Gly Ile Gly Phe Tyr Gly Arg Val Pro Lys Arg Ala Val
                    310
                                        315
Glu Pro Gly Ile Asp Trp Ser Lys Pro Asp Ala Gln Asn Asn Pro Val
                325
                                    330
Thr Gln Pro Tyr Phe Gly Pro Gln Glu Leu Ser Leu Phe Lys Ser Leu
            340
                                345
                                                     350
Gly Tyr Asp Leu Thr Lys Asp Thr Tyr Val Lys Tyr Asn Asp Ile Val
        355
                            360
                                                365
Arg Lys Leu Leu Asn Asp Pro Gln Lys Arg Phe Thr Glu His Trp Asp
    370
                        375
                                            380
Glu Gln Ala Lys Val Pro Trp Leu Ser Val Lys Ser Ala Asp Gly Lys
                                        395
                    390
Ala Leu Phe Ala Ile Ser Tyr Glu Asn Pro Arg Ser Val Ala Ile Lys
                                    410
               405
Ala Asp Tyr Ile Lys Glu Lys Gly Leu Ala Gly Ala Met Phe Trp Glu
            420
                                425
                                                    430
Tyr Gly Ala Asp Asp Glu Asn Gln Leu Ala Lys Gln Leu Ala Glu Ser
       435
                            440
Leu Gly Ile Leu His Gln
    450
                        455
<210> 9412
<211> 315
<212> PRT
<213> Enterobacter cloacae
<400> 9412
Lys Glu Val Met Met Ala Ser Ile Tyr Thr Leu Thr Leu Ser Pro Ser
Leu Asp Ser Ala Thr Met Thr Pro Gln Ile Tyr Pro Glu Gly Lys Leu
                                25
Arg Cys Ser Ala Pro Val Phe Glu Pro Gly Gly Gly Ile Asn Val
                            40
Ala Arg Ala Ile Thr His Leu Gly Gly Lys Ala Thr Ala Ile Phe Pro
Ala Gly Gly Ala Thr Gly Glu His Leu Val Ala Leu Leu Ala Asp Glu
                    70
                                        75
```

Gln Val Ala Val Asp Thr Val Asp Ala Lys Asp Trp Thr Arg Gln Asn

Leu His Val His Val Glu Ser Ser Gly Glu Gln Tyr Arg Phe Val Met

85

```
100
                                105
Pro Gly Ala Lys Leu Thr Asp Asp Glu Phe Arg Gln Leu Glu Glu Lys
                            120
                                                 125
Val Leu Thr Ile Glu Ser Gly Ser Leu Leu Val Ile Ser Gly Ser Leu
                        135
                                            140
Pro Pro Gly Val Lys Thr Glu Lys Leu Thr Ala Leu Val Gln Ala Ala
                    150
                                         155
Leu Gln Arg Gly Ile Arg Cys Ile Val Asp Ser Ser Gly Glu Ala Leu
                165
                                    170
Lys Ala Ala Leu Glu Pro Gly Gln Leu Glu Leu Val Lys Pro Asn Gln
            180
                                185
Lys Glu Leu Ser Ala Leu Val Asn Arg Glu Leu Ser Gln Pro Asp Asp
                            200
Val Arg Thr Ala Ala Glu Glu Leu Val Arg Thr Gly Lys Ala His Arg
                                             220
Val Val Val Ser Leu Gly Pro Gln Gly Ala Leu Ala Val Asp Lys Thr
                    230
                                         235
Gly Phe Val Gln Val Val Pro Pro Pro Met Lys Ser Gln Ser Thr Val
                245
                                     250
Gly Ala Gly Asp Ser Met Val Gly Ala Met Val Leu Lys Leu Ala Gln
            260
                                265
Gly Ala Ser Leu Leu Glu Met Ala Arg Tyr Gly Val Ala Ala Gly Ser
                            280
Ala Ala Thr Ile Asn Gln Gly Thr Arg Leu Cys Ser Leu Ala Asp Thr
                        295
Gln Lys Ile Val Asp Tyr Leu Glu Arg Ser
                    310
<210> 9413
<211> 228
<212> PRT
<213> Enterobacter cloacae
<400> 9413
Gly Asp Val Val Met Ser Thr Pro Arg Lys Ile Leu Ala Ala Ile Phe
                                    10
Asp Met Asp Gly Leu Leu Ile Asp Ser Glu Pro Leu Trp Asp Arg Ala
            20
                                25
Glu Leu Asp Val Met Ala Ser Leu Gly Val Asp Ile Ser Arg Asp
                            40
                                                 45
Glu Leu Pro Asp Thr Leu Gly Leu Arg Ile Asp Met Val Val Asp Leu
                        55
Trp Tyr Ala His Gln Pro Trp Val Gly Pro Asp Arg Asp Glu Val Thr
                    70
                                        75
Ala Arg Ile Ile Asn Arg Ala Ile Ser Leu Val Glu Glu Tyr Lys Pro
                85
                                    90
Leu Leu Pro Gly Val Arg Asp Ala Ile Ala Leu Cys Lys Ala Gln Gly
                                105
Leu Lys Val Gly Leu Ala Ser Ala Ser Pro Leu His Met Leu Glu Lys
                            120
Val Leu Thr Met Phe Gly Leu Arg Asp Ser Phe Asp Ala Leu Ala Ser
                        135
                                            140
```

Ala Glu Lys Leu Pro Tyr Ser Lys Pro His Pro Gln Val Tyr Met Asp

Cys Ala Ala Lys Leu Gly Leu Asp Pro Leu Thr Cys Val Ala Leu Glu

Asp Ser Val Asn Gly Met Val Ala Ser Lys Ala Ala Arg Met Arg Ser 185

Ile Val Val Pro Ala Glu Glu Gly Arg His Asp Pro Arg Phe Ala Leu 200

Ala Asp Val Arg Leu Thr Ser Leu Glu Glu Leu Thr Ala Arg His Leu

155

190

205

170

150

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210
                        215
                                            220
Arg Gly Glu
225
<210> 9414
<211> 312
<212> PRT
<213> Enterobacter cloacae
<400> 9414
Ile Ala Val Lys Gln Tyr Thr Gln Asn Cys Asp Pro Cys Arg Phe Pro
Asp Lys Gly Leu Val Leu Thr Asp His Thr Phe Cys Leu Val Leu His
                                25
Arg Glu Gly Val Met Ala Leu Gln Gln Glu Ile Ile Gln Ala Leu Gly
                            40
Ala Lys Pro Ala Ile Asp Ala Asn Glu Glu Ile Arg Arg Ser Val Asp
                       55
Phe Leu Lys Ala Tyr Leu Ser Ala His Pro Phe Leu Lys Thr Leu Val
                   70
                                        75
Leu Gly Ile Ser Gly Gly Gln Asp Ser Thr Leu Ala Gly Lys Leu Ser
               85
                                    90
Gln Met Ala Ile Ser Glu Leu Arg Asp Glu Thr Gly Asp Thr Ala Leu
           100
                               105
Gln Phe Ile Ala Val Arg Leu Pro Tyr Gly Val Gln Ala Asp Glu Gln
                           120
                                               125
Asp Cys Gln Asp Ala Ile Ala Phe Ile Gln Pro Asp Arg Val Leu Thr
                       135
                                           140
Val Asn Ile Lys Gly Ser Val Leu Ala Ser Glu Gln Ala Leu Arg Glu
                  150
                                       155
Ala Gly Ile Glu Leu Ser Asp Phe Val Arg Gly Asn Glu Lys Ala Arg
               165
                                   170
Glu Arg Met Lys Ala Gln Tyr Ser Ile Ala Gly Met Thr Lys Gly Val
           180
                               185
Val Val Gly Thr Asp His Ala Ala Glu Ala Ile Thr Gly Phe Phe Thr
                           200
Lys Tyr Gly Asp Gly Gly Thr Asp Ile Asn Pro Leu Phe Arg Leu Asn
                       215
                                           220
Lys Arg Gln Gly Lys Gln Leu Leu Ala Ala Leu Gly Cys Pro Glu His
                   230
                                       235
Leu Tyr Lys Lys Ala Pro Thr Ala Asp Leu Glu Asp Asp Arg Pro Ser
                                    250
Leu Pro Asp Glu Ala Ala Leu Gly Val Thr Tyr Asp Asn Ile Asp Asp
                               265
Tyr Leu Glu Gly Lys Thr Leu Asp Glu Gly Thr Ala Asn Ile Ile Glu
                           280
Gly Trp Tyr Leu Lys Thr Glu His Lys Arg Arg Pro Pro Ile Thr Val
Phe Asp Asp Phe Trp Lys Lys
<210> 9415
<211> 381
<212> PRT
<213> Enterobacter cloacae
<400> 9415
Val Gly Thr Pro Ala Arg Arg Gly Val Asp Leu Ala Ala Ala Cys Pro
                                    10
Pro Gly Ala Ala Pro Arg Val Arg Ala Val Cys Arg Gly Ala Val Ala
```

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Gly His Arg Arg Pro Val Arg Cys Gly Ala Leu Glu Pro Tyr Ala Leu
Gly Pro Pro Val Asp Ala Pro Gly Ala Ala Thr Gly Leu Ala Pro Ala
Arg Ser Pro Ala Tyr Pro His Cys Gln Asn Ala Gly Leu Ala Ala Gly
Glu Asn Phe Leu Ala Ser Glu Met Pro Ile Asp Gly Ser Ser Gly Pro
Ala Gly Leu Cys His Arg Leu Phe Arg Glu His Gly Pro Val His Ala
            100
                                105
Tyr Pro Leu Ala Gly Gly Gly Thr Phe His His Pro Asp Asp Gly Gly
                            120
Gly Arg Pro Gln Gln Arg Arg Gln His Ser Asp Pro Arg Gln Pro Gly
                        135
Ala Gly Ser Val Val Val Asp Gln Gln Arg Ile Cys Pro Cys Arg Ala
                    150
                                        155
Ala Leu Pro Ala Arg Gly Pro Ser Gln Thr Arg Ile Thr Leu Met Leu
                165
                                    170
Thr Val Lys Asn Leu Thr Ile Ala Pro Leu Leu His Glu Val Asn Phe
                                185
Arg Val Pro Ala Gly Glu Ile Val Thr Leu Met Gly Pro Ser Gly Ser
                            200
        195
Gly Lys Ser Thr Leu Phe Ala Trp Met Val Gly Ala Leu Ser Ala Asp
                        215
                                            220
Phe Lys Ala His Gly Glu Leu Trp Leu Asn Asp Arg Arg Cys Asp Met
                    230
                                        235
Leu Pro Val Glu Thr Arg Gly Ile Gly Ile Leu Phe Gln Asp Ala Leu
                245
                                    250
Leu Phe Asp Ala Phe Ser Val Gly Gln Asn Leu Met Leu Ala Leu Pro
                                265
Ala His Ile Val Gly Arg Ala Arg Arg Asn Ala Val Glu Gln Ala Leu
                            280
Glu Thr Ala Gly Leu Ala Asn His Tyr Thr Ser Asp Pro Ala Thr Leu
                                            300
                        295
Ser Gly Gly Glu Arg Ala Arg Val Ser Leu Leu Arg Ala Leu Leu Ala
                    310
                                        315
Gln Pro Gln Ala Leu Leu Asp Glu Pro Phe Ser Arg Leu Asp Lys
                325
                                    330
Thr Leu Arg Ala Ser Phe Arg Ala Trp Val Phe Glu Val Thr Arg Gln
                                345
Arg Arg Ile Pro Val Val Leu Val Thr His Asp Glu Asp Asp Ile Pro
                           360
Pro Gly Gly Glu Val Ile Glu Ile Ser Arg Trp Gln
                        375
```

<210> 9416

<211> 87

<212> PRT

<213> Enterobacter cloacae

<400> 9416

 Arg
 Pro
 Ala
 Leu
 Tyr
 Pro
 Ala
 Pro
 Arg
 Ser
 Ala
 Arg
 Pro
 Asp
 Ala
 Gly

 Cys
 Trp
 His
 Gln
 Tyr
 Lys
 Met
 Arg
 Ser
 Gly
 Arg
 Ser
 Ala
 Arg
 Pro
 Ala

 Ser
 Leu
 Val
 Ala
 Ile
 Ala
 Glu
 Pro
 Gly
 Ser
 Asn
 Ala
 Pro
 Cys
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Ala
 Tyr
 Ala
 Ala
 Tyr
 Ala
 Arg
 Ser
 Val
 Phe
 Ser
 Ser
 Ala
 Pro
 Arg
 Ser
 Val
 Phe
 Ser
 Ser
 Ala
 Pro
 Arg
 Ser
 Val
 Phe
 Ser
 Ala
 Pro
 A

Ala Trp Arg Arg Trp Gly 85

<210> 9417 <211> 622

<212> PRT <213> Enterobacter cloacae <400> 9417 Gly Glu Tyr Met Arg Thr Leu Trp Arg Ile Ile Ala Gly Phe Phe Lys 10 Trp Thr Trp Arg Leu Leu Asn Phe Val Arg Asn Leu Val Met Asn Ile Phe Phe Ile Leu Leu Val Leu Val Cys Ala Gly Ile Trp Met His Ile Ser Asn Ala Asn Gln Ser Gln His Ser Thr Arg Gly Ala Leu Leu Leu Asp Ile Thr Gly Val Ile Val Asp Lys Pro Ser Thr Ser Asn Arg Leu 75 Gly Val Ile Gly Arg Gln Leu Phe Gly Ala Thr Ser Asp Arg Leu Gln 85 90 Glu Asn Ser Leu Phe Asp Ile Val Asp Thr Ile Arg Gln Ala Lys Asp 100 105 Asp Arg Asn Ile Thr Gly Ile Val Leu Asp Leu Lys Asp Phe Ala Gly 115 120 125 Ala Asp Gln Pro Ser Met Gln Tyr Ile Gly Lys Ala Leu Arg Glu Phe 135 140 Arg Asp Ser Gly Lys Pro Val Ile Ala Ile Gly Asp Ser Tyr Thr Gln 150 155 Gly Gln Tyr Tyr Leu Ala Ser Phe Ala Asn Lys Ile Trp Leu Ser Pro 165 170 Gln Gly Thr Val Asp Leu His Gly Phe Ala Thr Asn Gly Leu Tyr Tyr 180 185 Lys Ser Leu Leu Asp Lys Leu Lys Val Thr Thr His Val Phe Arg Val 200 Gly Thr Tyr Lys Ser Ala Val Glu Pro Phe Ile Arg Asp Asp Met Ser 215 220 Pro Ala Ala Arg Glu Ala Asp Ser Arg Trp Ile Gly Glu Leu Trp Gln 235 230 Asn Tyr Leu Gly Thr Ile Ala Ala Asn Arg Gln Ile Thr Ala Glu Gln 250 245 Val Phe Pro Gly Ala Arg Gly Val Leu Asp Gly Leu Arg Lys Val Asp 260 265 270 Gly Asp Thr Ala Lys Tyr Ala Leu Asp Asn Lys Leu Val Asp Gln Leu 280 Gly Ser Ser Ala Glu Ile Glu Lys Ala Leu Thr Lys Gln Phe Gly Trp 295 300 Ser Lys Glu Asp Lys Asn Tyr Ser Ala Ile Ser Met Tyr Asp Tyr Ala 310 315 Ala Lys Lys Ser Asp Asp Ser Gly Asp Ser Ile Ala Val Val Phe Ala 330 Asn Gly Ala Ile Met Asp Gly Glu Glu Thr Pro Gly Asn Val Gly Gly 345 Asp Thr Thr Ala Ser Gln Ile Arg Asp Ala Arg Leu Asp Pro Lys Val 360 Lys Ala Ile Val Leu Arg Val Asn Ser Pro Gly Gly Ser Val Ser Ala 375 380 Ser Glu Val Ile Arg Ala Glu Leu Ala Ala Ala Arg Ala Ala Gly Lys 390 395 Pro Val Val Ser Met Gly Gly Met Ala Ala Ser Gly Gly Tyr Trp

410

Ile Ser Thr Pro Ala Asn Tyr Ile Val Ala Asn Pro Ser Thr Leu Thr 420 425 Gly Ser Ile Gly Ile Phe Gly Val Ile Asn Thr Val Glu Asn Ser Leu 440 445 Asp Tyr Leu Gly Val His Thr Asp Gly Val Ser Thr Ser Pro Leu Ala 450 455 460 Asp Val Ser Val Thr Lys Ser Leu Pro Pro Glu Val Ser Glu Met Met 470 475 Gln Leu Ser Ile Glu Ser Gly Tyr Lys Arg Phe Ile Thr Leu Val Ala 485 490 Asp Ser Arg Lys Lys Thr Pro Asp Gln Ile Asp Gln Ile Ala Gln Gly 500 505 His Val Trp Thr Gly Gln Asp Ala Lys Ser Asn Gly Leu Val Asp Ser 520 Leu Gly Asp Phe Asp Asp Ala Val Lys Lys Ala Ala Glu Leu Ala Lys 535 540 Leu Lys Gln Trp His Val Asp Tyr Tyr Gln Asp Glu Pro Thr Phe Phe 550 555 Asp Met Val Met Asp Ser Met Ser Gly Ser Val Arg Ala Met Leu Pro 565 570 Asp Ala Leu Gln Ala Tyr Leu Pro Ala Pro Val Ala Thr Ala Ala Lys 585 580 Ala Met Lys Ala Glu Ser Asp Lys Leu Ala Ala Phe Asn Asp Pro Gln 595 600 Ser Arg Tyr Ala Phe Cys Leu Thr Cys Ala Asn Val Arg 615

<210> 9418

<211> 525

<212> PRT

<213> Enterobacter cloacae

<400> 9418

Pro Met Ser Gln Gln Val Val Ile Phe Asp Thr Thr Leu Arg Asp Gly 10 Glu Gln Ala Leu Gln Ala Ser Leu Ser Val Lys Glu Lys Leu Gln Ile 251 Ala Leu Ala Leu Glu Arg Met Gly Val Asp Val Met Glu Val Gly Phe 40 Pro Val Ser Ser Pro Gly Asp Phe Glu Ser Val Gln Thr Ile Ala Arg 55 Thr Ile Lys Asn Ser Arg Val Cys Gly Leu Ala Arg Cys Val Glu Lys 70 75 Asp Ile Asp Val Ala Ala Glu Ser Leu Lys Val Ala Glu Ala Phe Arq 85 90 Ile His Thr Phe Ile Ala Thr Ser Pro Met His Ile Ala Thr Lys Leu 105 Arg Ser Thr Leu Asp Glu Val Ile Glu Arg Ala Val Tyr Met Val Lys 120 Arg Ala Arg Asn Tyr Thr Asp Asp Val Glu Phe Ser Cys Glu Asp Ala 135 140 Gly Arg Thr Pro Ile Asp Asp Leu Ala Arg Val Val Glu Ala Ala Ile 150 155 Asn Ala Gly Ala Arg Thr Ile Asn Ile Pro Asp Thr Val Gly Tyr Thr 165 170 Met Pro Phe Glu Phe Ser Asn Ile Ile Thr Gly Leu Tyr Asp Arg Val 180 185 190 Pro Asn Ile Asp Lys Ala Ile Ile Ser Val His Thr His Asp Asp Leu 200 205 Gly Leu Ala Val Gly Asn Ala Ile Ala Ala Val His Ala Gly Ala Arg 215 220

```
Gln Val Glu Gly Ala Met Asn Gly Ile Gly Glu Arg Ala Gly Asn Cys
                    230
                                        235
Ser Leu Glu Glu Val Ile Met Ala Ile Lys Val Arg Lys Asp Ile Met
                                    250
                245
Asn Val His Thr Arg Ile Asn His Asn Glu Ile Trp Arg Thr Ser Gln
           260
                                265
Thr Val Ser Gln Ile Cys Asn Met Pro Ile Pro Ala Asn Lys Ala Ile
                            280
Val Gly Ala Gly Ala Phe Ala His Ser Ser Gly Ile His Gln Asp Gly
                        295
                                            300
Val Leu Lys Asn Arg Glu Asn Tyr Glu Ile Met Thr Pro Glu Ser Ile
                    310
Gly Leu Asn Gln Val Gln Leu Asn Leu Thr Ser Arg Ser Gly Arg Ala
                                    330
Ala Val Lys His Arg Met Glu Glu Met Gly Tyr Lys Asp Ser Asp Tyr
                                345
Asn Met Asp Gln Leu Tyr Asp Ala Phe Leu Lys Leu Ala Asp Lys Lys
        355
                            360
Gly Gln Val Phe Asp Tyr Asp Leu Glu Ala Leu Ala Phe Ile Asn Lys
                       375
                                            380
Gln Glu Glu Pro Glu His Phe Arg Leu Asp Tyr Phe Thr Val Gln
                   390
                                        395
Ser Gly Ser Ser Asp Ile Ala Thr Ala Ser Val Lys Leu Ala Cys Gly
               405
                                    410
Asp Glu Ile Lys Ala Glu Ala Ala Asn Gly Asn Gly Pro Val Asp Ala
           420
                                425
Ile Tyr Gln Ala Ile Asn Arg Val Thr Glu Tyr Asp Val Glu Leu Val
                           440
                                                445
                .
Lys Tyr Asp Leu Thr Ala Lys Gly His Gly Lys Asp Ala Leu Gly Gln
                                            460
                       455
Val Asp Ile Val Val Asn Tyr Asn Gly Arg Arg Phe His Gly Val Gly
                                        475
                   470
Leu Ala Thr Asp Ile Val Glu Ser Ser Ala Lys Ala Met Val His Val
               485
                                    490
Leu Asn Asn Ile Trp Arg Ala Ala Glu Val Glu Lys Glu Leu Gln Arg
                               505
Lys Ala Gln Asn Lys Glu Asn Asn Lys Glu Thr Val
                            520
<210> 9419
<211> 507
<212> PRT
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<213> Enterobacter cloacae

<400> 9419

His Ile Lys Asp Thr Ile Met Thr Ile Phe Asn Asn Tyr Glu Val Trp Phe Val Ile Gly Ser Gln His Leu Tyr Gly Pro Glu Ala Leu Gln Gln Val Thr Lys His Ala Glu His Val Val Asn Ala Leu Asn Ala Glu Ala Lys Leu Pro Cys Lys Leu Val Leu Lys Pro Leu Gly Thr Thr Pro Asp Glu Ile Thr Asn Ile Cys Arg Asp Ala Asn Tyr Asp Asp Lys Cys Ala 70 75 Gly Leu Val Val Trp Leu His Thr Phe Ser Pro Ala Lys Met Trp Ile 85 90 Asn Gly Leu Ala Ile Leu Asn Lys Pro Leu Leu Gln Phe His Thr Gln 100 105 110 Phe Asn Ala Ser Leu Pro Trp Asp Ser Ile Asp Met Asp Phe Met Asn 120 125

```
Leu Asn Gln Thr Ala His Gly Gly Arg Glu Phe Gly Phe Ile Gly Ala
                        135
                                            140
Arg Met Arg Gln Gln His Ala Val Val Thr Gly His Trp Gln Asp Gly
                    150
                                        155
Gln Ala Gln Lys Arg Ile Gly Ser Trp Met Arg Gln Ala Val Ser Lys
                                    170
               165
Gln Asp Thr Arg His Leu Lys Val Val Arg Phe Gly Asp Asn Met Arg
           180
                                185
Glu Val Ala Val Thr Asp Gly Asp Lys Val Ala Ala Gln Ile Lys Phe
                            200
Gly Phe Ser Val Asn Thr Trp Ala Val Gly Asp Leu Val Gln Val Val
                        215
                                            220
Asn Asp Ile Ser Asp Gly Asp Val Asn Ala Leu Val Asp Glu Tyr Glu
                    230
                                        235
Ser Ser Tyr Arg Leu Thr Pro Ala Ala Gln Ile Asn Gly Asp Lys Arg
               245
                                    250
Gln Asn Val Leu Asp Ala Ala Arg Ile Glu Leu Gly Met Lys Arg Phe
                                265
Leu Glu Gln Gly Gly Phe His Ala Phe Thr Thr Phe Glu Asp Leu
                            280
His Gly Leu Lys Gln Leu Pro Gly Leu Ala Val Gln Arg Leu Met Gln
                        295
Gln Gly Tyr Gly Phe Ala Gly Glu Gly Asp Trp Lys Thr Ala Ala Leu
                    310
                                        315
Leu Arg Ile Met Lys Val Met Ser Thr Gly Leu Gln Gly Gly Thr Ser
               325
                                    330
Phe Met Glu Asp Tyr Thr Tyr His Phe Glu Asn Gly Asn Asp Leu Val
                                345
Leu Gly Ser His Met Leu Glu Val Cys Pro Ser Ile Ala Val Glu Glu
                            360
Lys Pro Ile Leu Asp Val Gln Tyr Leu Gly Ile Gly Gly Lys Ala Asp
                       375
                                            380
Pro Ala Arg Leu Ile Phe Asn Thr Arg Thr Gly Pro Ala Ile Asn Ala
                   390
                                       395
Ser Leu Ile Asp Leu Gly Asp Arg Phe Arg Leu Leu Val Asn Cys Val
               405
                                    410
Asp Ala Val Glu Thr Pro His Ser Leu Pro Lys Leu Pro Val Ala Asn
                               425
Ala Leu Trp Lys Ala Gln Pro Asp Leu Pro Thr Ala Ser Glu Ala Trp
                           440
                                                445
Ile Leu Ala Gly Gly Ala His His Thr Val Phe Ser His Ala Leu Asp
                       455
                                           460
Leu Asn Asp Met Arg Gln Phe Ala Glu Leu His Asp Ile Glu Leu Thr
                                       475
                   470
Val Ile Asp Asn Asp Thr Arg Leu Pro Ala Phe Lys Asp Ala Leu Arg
               485
                                   490
Trp Asn Glu Val Tyr Tyr Gly Ser Lys Arg
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<210> 9420 <211> 973

<212> PRT

<213> Enterobacter cloacae

<400> 9420

Arg Asn Asp Ser Pro Val Thr Arg Val Met Phe Asn Pro Gly Asp Thr Val Thr Ser His Glu Gly Trp Gln Leu Lys Val Glu Asp Val Lys Glu Glu Asn Gly Leu Leu Ala Tyr Ile Gly Thr Arg Leu Asp Thr Asp Glu 85 Thr Asn Val Ile Leu Arg Glu Val Leu Leu Asp Ser Lys Leu Val Phe 100 105 Ser Lys Pro Gln Asp Arg Leu Phe Ala Gly Gln Ile Asp Arg Met Asp 120 115 Arg Phe Ser Leu Arg Tyr Arg Ala Arg Lys Phe Gln Ser Glu Gln Tyr 135 Arg Met Pro Trp Ser Gly Leu Arg Gly Gln Arg Thr Ser Leu Ile Pro 150 155 His Gln Leu Asn Ile Ala His Asp Val Gly Arg Arg His Ala Pro Arg 170 Val Leu Leu Ala Asp Glu Val Gly Leu Gly Lys Thr Ile Glu Ala Gly Met Ile Leu His Gln Gln Leu Leu Ser Gly Ala Ala Glu Arg Val Leu 200 Ile Val Val Pro Glu Thr Leu Gln His Gln Trp Leu Val Glu Met Leu 215 Arg Arg Phe Asn Leu Arg Phe Ser Leu Phe Asp Asp Glu Arg Tyr Ala 230 235 Glu Ala Gln His Asp Ala Asp Asn Pro Phe Glu Thr Glu Gln Leu Val 245 250 Ile Cys Ser Leu Asp Phe Val Arg Arg Ser Lys Gln Arg Leu Glu His 265 Leu Cys Asp Ala Glu Trp Asp Leu Met Val Val Asp Glu Ala His His 280 Leu Val Trp Ser Glu Asp Ala Pro Ser Arg Glu Tyr Met Ala Ile Glu 295 300 Gln Leu Ala Glu Arg Val Pro Gly Val Leu Leu Leu Thr Ala Thr Pro 310 315 Glu Gln Leu Gly Leu Glu Ser His Phe Ala Arg Leu Arg Leu Leu Asp 325 330 Pro Asn Arg Phe His Asp Phe Glu Gln Phe Val Glu Glu Gln Lys Asn 345 Tyr Arg Pro Val Ala Asp Ala Val Ala Leu Leu Leu Ala Gly Asn Arg 360 Leu Ser Asn Asp Glu Leu Asn Thr Leu Ser Asp Leu Ile Gly Glu Gln 375 380 Asp Ile Glu Pro Leu Gln Ala Ala Asn Ser Asp Ser Asp Asn Ala 390 395 Gly Ser Ala Arg Lys Glu Leu Ile Asp Met Leu Met Asp Arg His Gly 405 410 Thr Ser Arg Val Leu Phe Arg Asn Thr Arg Asn Gly Val Lys Gly Phe 420 425 430 Pro Lys Arg Glu Leu His Thr Ile Lys Leu Pro Leu Pro Thr Gln Tyr 440 Gln Thr Ala Ile Lys Val Ser Gly Ile Met Gly Thr Arg Lys Ser Ala 455 Glu Asp Arg Ala Arg Asp Met Leu Tyr Pro Glu Gln Ile Tyr Gln Glu 475 Phe Glu Gly Asp Thr Gly Thr Trp Trp Asn Phe Asp Pro Arg Val Glu 490 Trp Leu Met Gly Tyr Leu Thr Ala His Arg Ser Arg Lys Val Leu Val 505 Ile Cys Ala Lys Ala Ala Thr Ala Leu Gln Leu Glu Gln Val Leu Arg 520 Glu Arg Glu Gly Ile Arg Ala Ala Val Phe His Glu Gly Met Ser Ile

```
535
Ile Glu Arg Asp Arg Ala Ala Ala Trp Phe Ser Glu Glu Asp Ser Gly
                   550
                                        555
Ala Gln Val Leu Leu Cys Ser Glu Ile Gly Ser Glu Gly Arg Asn Phe
                565
                                    570
Gln Phe Ala Ser Asn Leu Val Met Phe Asp Leu Pro Phe Asn Pro Asp
            580
                                585
Leu Leu Glu Gln Arg Ile Gly Arg Leu Asp Arg Ile Gly Gln Ala His
                            600
                                                605
Asp Ile Gln Ile His Val Pro Tyr Leu Glu Lys Thr Ala Gln Ser Val
                        615
                                            620
Leu Val Arg Trp Tyr His Glu Gly Leu Asp Ala Phe Glu His Thr Cys
                    630
                                        635
Pro Thr Gly Arg Thr Ile Tyr Asp Gln Val His Ala Asp Leu Ile Gly
                645
                                    650
Tyr Leu Ala Ala Pro Glu Asn Thr Glu Gly Phe Asp Glu Leu Ile Lys
                                665
Ser Cys Arg Glu Lys His Asp Ala Leu Lys Ala Gln Leu Glu Gln Gly
                            680
Arg Asp Arg Leu Leu Glu Ile His Ser Asn Gly Gly Glu Lys Ala Gln
                        695
Gln Leu Ala Glu Ser Ile Glu Glu Gln Asp Asp Asp Thr Ser Leu Ile
                    710
                                        715
Ser Phe Ser Met Asn Leu Phe Asp Ile Val Gly Ile Asn Gln Asp Asp
                725
                                    730
Arg Gly Glu Asn Met Ile Val Leu Thr Pro Ser Asp His Met Leu Val
            740
                                745
Pro Asp Phe Pro Gly Leu Pro Glu Asp Gly Cys Thr Ile Thr Phe Glu
                            760
Arg Asp Val Ala Leu Ser Arg Glu Asp Ala Gln Phe Ile Thr Trp Glu
                        775
His Pro Leu Ile Arg Asn Gly Leu Asp Leu Ile Leu Ser Gly Asp Thr
                    790
                                        795
Gly Ser Ser Thr Ile Ser Leu Leu Lys Asn Lys Ala Leu Pro Val Gly
                805
                                    810
Thr Leu Leu Val Glu Leu Ile Tyr Val Val Glu Ala Gln Ala Pro Lys
                                825
            820
Gln Leu Gln Leu Asn Arg Phe Leu Pro Pro Thr Pro Val Arg Leu Leu
                            840
                                                845
Leu Asp Lys Asn Gly Thr Asn Leu Ala Gly Gln Val Glu Phe Glu Ser
                       855
                                            860
Phe Asn Arg Gln Leu Ser Ala Val Asn Arg His Thr Gly Ser Lys Leu
                    870
                                        875
Val Asn Ala Val Gln Gln Asp Val His Ala Ile Leu Gln Leu Gly Glu
                                    890
               885
Ala Gln Ala Glu Lys Ala Ala Arg Glu Leu Ile Asp Ala Ala Arg Ser
            900
                                905
Glu Ala Asp Glu Lys Leu Ser Ala Glu Leu Ser Arg Leu Glu Ala Leu
                            920
                                                925
Lys Ala Val Asn Pro Asn Ile Arg Asp Glu Leu Ala Ala Ile Glu
                        935
                                            940
Ser Asn Arg Gln Gln Val Leu Glu Ser Leu Asn Gln Ala Gly Trp Arg
                    950
                                        955
Leu Asp Ala Leu Arg Leu Ile Val Val Thr His Gln
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<sup>&</sup>lt;210> 9421

<sup>&</sup>lt;211> 167

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
<220>
<221>UNSURE
<222>(157)
<220>
<221>UNSURE
<222>(167)
<400> 9421
Ala Glu Arg Lys Met Val Met Glu Pro Tyr Asn Pro Pro Met Asp Pro
                                    10
Trp Leu Val Ile Leu Tyr Gln Asp Glu His Ile Met Val Val Asn Lys
Pro Ser Gly Leu Leu Ser Val Pro Gly Arg Leu Glu His Lys Asp
Ser Val Met Thr Arg Ile Gln Arg Asp Tyr Pro Gln Ala Glu Ser Val
His Arg Leu Asp Met Ala Thr Ser Gly Val Ile Val Val Ala Leu Asn
                    70
                                        75
Lys Ala Ala Glu Arg Glu Leu Lys Arg Gln Phe Arg Glu Arg Glu Pro
                                    90
                85
Lys Lys Gln Tyr Val Ala Arg Val Trp Gly His Pro Ala Gln Ala Glu
                                105
            100
Gly Leu Val Asp Leu Pro Leu Ile Cys Asp Trp Pro Asn Arg Pro Lys
                            120
Gln Lys Val Cys Tyr Glu Thr Gly Lys Ala Ala Gln Thr Glu Tyr Glu
                        135
                                            140
Val Leu Glu Tyr Ala Arg His Asn Val Phe Ile Thr Xaa Arg Gln Ile
                    150
                                        155
Arg His Asn Leu Thr Gln Xaa
<210> 9422
<211> 471
<212> PRT
<213> Enterobacter cloacae
<400> 9422
Arg Gly Val Ile Met Ala Lys Thr Leu Tyr Glu Lys Leu Phe Asp Ala
                                    10
His Val Val Tyr Glu Ala Pro Asn Glu Thr Pro Leu Leu Tyr Ile Asp
                                25
Arg His Leu Val His Glu Val Thr Ser Pro Gln Ala Phe Asp Gly Leu
                            40
Arg Ala His Lys Arg Pro Val Arg Gln Pro Gly Lys Thr Phe Ala Thr
                        55
Met Asp His Asn Val Ser Thr Gln Thr Lys Asp Ile Asn Ala Ser Gly
Glu Met Ala Arg Ile Gln Met Gln Glu Leu Ile Lys Asn Cys Asn Glu
Phe Gly Val Glu Leu Tyr Asp Leu Asn His Pro Tyr Gln Gly Ile Val
                                105
His Val Met Gly Pro Glu Gln Gly Ile Thr Leu Pro Gly Met Thr Ile
                            120
Val Cys Gly Asp Ser His Thr Ala Thr His Gly Ala Phe Gly Ala Leu
                        135
                                            140
Ala Phe Gly Ile Gly Thr Ser Glu Val Glu His Val Leu Ala Thr Gln
                    150
                                        155
Thr Leu Lys Gln Gly Arg Ala Lys Thr Met Lys Ile Glu Val Lys Gly
```

Lys Ala Ala Pro Gly Ile Thr Ala Lys Asp Ile Val Leu Ala Ile Ile

```
185
Gly Lys Thr Gly Ser Ala Gly Gly Thr Gly His Val Val Glu Phe Cys
                            200
                                                 205
Gly Asp Ala Ile Gln Ala Leu Ser Met Glu Gly Arg Met Thr Leu Cys
    210
                        215
                                             220
Asn Met Ala Ile Glu Met Gly Ala Lys Ala Gly Leu Val Ala Pro Asp
                                         235
                    230
Glu Thr Thr Phe Asn Tyr Val Lys Gly Arg Leu His Ala Pro Lys Gly
                245
                                    250
Gln Asn Phe Asp Asp Ala Val Ala Tyr Trp Lys Thr Leu Lys Thr Asp
                                                     270
            260
                                265
Glu Gly Ala Ile Phe Asp Thr Val Val Thr Leu Gln Ala Glu Glu Ile
        275
                            280
                                                 285
Ala Pro Gln Val Thr Trp Gly Thr Asn Pro Gly Gln Val Ile Ser Val
                        295
                                             300
Asn Asp Ser Ile Pro Asp Pro Ala Ser Phe Ala Asp Pro Val Glu Arg
                    310
                                         315
Ala Ser Ala Glu Lys Ala Leu Ala Tyr Met Gly Leu Lys Pro Gly Val
                325
                                     330
Pro Leu Thr Asp Val Ser Ile Asp Lys Val Phe Ile Gly Ser Cys Thr
            340
                                345
Asn Ser Arg Ile Glu Asp Leu Arg Ala Ala Ala Glu Ile Ala Lys Gly
                            360
Arg Lys Val Ala Pro Gly Val Gln Ala Leu Val Val Pro Gly Ser Gly
    370
                        375
Pro Val Lys Ala Gln Ala Glu Ala Glu Gly Leu Asp Lys Ile Phe Ile
                    390
                                         395
Glu Ala Gly Phe Glu Trp Arg Leu Pro Gly Cys Ser Met Cys Leu Ala
                405
                                    410
Met Asn Asn Asp Arg Leu Asn Pro Gly Glu Arg Cys Ala Ser Thr Ser
                                425
            420
                                                     430
Asn Arg Asn Phe Glu Gly Arg Gln Gly Arg Gly Gly Arg Thr His Leu
        435
                            440
                                                 445
Val Ser Pro Ala Met Ala Ala Ala Ala Val Thr Gly His Phe Ala
                        455
Asp Ile Arg Ser Leu Lys
<210> 9423
<211> 537
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<212> PRT

<213> Enterobacter cloacae

<400> 9423

Met Ala Thr Arg Arg Gln Pro Leu Ile Pro Gly Trp Leu Val Pro Gly 10 Leu Leu Ala Ala Val Leu Met Val Val Val Ser Leu Gly Ala Phe Leu 25 Ala Leu Trp Phe Asn Ala Pro Glu Ser Asp Leu Leu Ala Leu Trp His Asp Ser Tyr Leu Trp His Val Ile Arg Phe Ser Phe Trp Gln Ala Phe Leu Ser Ala Leu Leu Ser Ala Ile Pro Ala Ile Phe Leu Ala Arg Ala 70 75 Leu Tyr Arg Arg Phe Pro Gly Arg Leu Ala Leu Leu Arg Leu Cys 90 Ala Met Thr Leu Ile Leu Pro Val Leu Val Ala Val Phe Gly Ile Leu 110 105 Ser Val Tyr Gly Arg Gln Gly Trp Leu Ala Ser Leu Phe Asn Leu Leu 120 125 Gly Leu Glu Trp Thr Phe Ser Pro Tyr Gly Leu Lys Gly Ile Leu Leu

```
135
Ala His Ile Phe Phe Asn Met Pro Met Ala Thr Arg Leu Phe Leu Gln
                                        155
                   150
Ala Leu Glu Asn Ile Pro Gly Glu Gln Arg Gln Ile Ala Ala Gln Leu
                165
                                    170
Gly Met Arg Gly Trp Ser Phe Phe Arg Phe Val Glu Trp Pro Trp Leu
            180
                                185
Arg Arg Gln Ile Ala Pro Val Ala Ala Leu Ile Phe Met Leu Cys Phe
                            200
Ala Ser Phe Ala Thr Val Leu Ser Leu Gly Gly Gly Pro Gln Ala Thr
                        215
                                            220
Thr Ile Glu Leu Ala Ile Tyr Gln Ala Leu Ser Tyr Asp Tyr Asp Pro
                    230
                                        235
Gly Arg Ala Ala Leu Leu Ala Ile Val Gln Met Val Cys Cys Leu Ala
                                    250
Leu Val Leu Leu Ser Gln Arg Leu Ser Lys Ala Ile Pro Thr Gly Ser
                                265
Asn Asn Leu Thr Gly Trp Arg Asp Pro Gln Asp Ser Leu His Ser Arg
                            280
Val Ala Asp Phe Met Leu Ile Ala Leu Ala Leu Leu Leu Leu Pro
                        295
Pro Leu Leu Ala Val Ile Val Asp Gly Leu Asn Arg Asn Val Leu Ser
                    310
                                        315
Val Leu Gln Gln Pro Val Leu Trp Gln Ala Thr Trp Thr Ser Leu Arg
                325
                                    330
Ile Ala Leu Ala Ala Gly Leu Leu Cys Val Ile Leu Thr Met Met Leu
                                345
Leu Trp Ser Ser Arg Glu Leu His Ala Arg His Ala Arg Lys Ala Gly
       355
                            360
                                                365
His Ala Leu Glu Leu Thr Gly Met Leu Ile Leu Ala Met Pro Gly Ile
                        375
Val Leu Ala Thr Gly Phe Phe Leu Leu Phe Asn Ser Thr Ile Gly Leu
                    390
                                        395
Pro Glu Ser Ala Asp Gly Ile Val Ile Phe Thr Asn Ala Leu Met Ala
                405
                                    410
Ile Pro Tyr Ala Leu Lys Val Leu Glu Asn Pro Met Arg Asp Val Asn
           420
                                425
                                                    430
Ser Arg Tyr Ser Leu Cys Gln Ser Leu Gly Met Gln Gly Trp Gln
       435
                            440
Arg Leu Lys Val Val Glu Leu Arg Ala Leu Lys Arg Pro Leu Ala Gln
                       455
                                           460
Ala Leu Ala Phe Ala Cys Val Leu Ser Ile Gly Asp Phe Gly Val Val
                   470
                                        475
Ala Leu Phe Gly Asn Glu Asp Phe Arg Thr Leu Pro Phe Trp Leu Tyr
               485
                                    490
Gln Gln Ile Gly Ser Tyr Arg Ser Gln Asp Gly Ala Val Thr Ala Leu
           500
                                505
Leu Leu Leu Leu Cys Phe Ala Leu Phe Thr Val Ile Glu Lys Leu
                            520
Pro Gly Arg Asp Val Lys Thr Asp
<210> 9424
<211> 372
<212> PRT
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<400> 9424

<213> Enterobacter cloacae

Arg Glu Gln Gln Gly Asn Arg Val Met Ser Lys Asn Tyr His Ile Ala 1 5 10 15 Val Leu Pro Gly Asp Gly Ile Gly Pro Glu Val Met Ala Gln Ala Leu

```
25
Lys Val Leu Glu Ala Val Arg Ser Arg Phe Ala Met Lys Ile Thr Thr
                            40
                                                 45
Ser His Tyr Asp Val Gly Gly Ile Ala Ile Asp Asn His Gly Thr Pro
                        55
Leu Pro Lys Gly Thr Val Glu Gly Cys Glu Asn Ala Asp Ala Val Leu
                                        75
Phe Gly Ser Val Gly Gly Pro Lys Trp Glu His Leu Pro Pro Ala Glu
                                    90
Gln Pro Glu Arg Gly Ala Leu Leu Pro Leu Arg Lys His Phe Lys Leu
                                105
Phe Ser Asn Leu Arg Pro Ala Lys Leu Tyr Pro Gly Leu Glu Glu Phe
                            120
Cys Pro Leu Arg Ala Asp Ile Ala Ala Asn Gly Phe Asp Ile Leu Cys
                        135
Val Arg Glu Leu Thr Gly Gly Ile Tyr Phe Gly Gln Pro Lys Gly Arg
                    150
                                        155
Glu Gly Ser Gly Gln His Glu Lys Ala Phe Asp Thr Glu Val Tyr His
                165
                                    170
                                                         175
Arg Phe Glu Ile Glu Arg Ile Ala His Ile Ala Phe Glu Ser Ala Arg
            180
                                185
Lys Arg Arg Arg Lys Val Thr Ser Ile Asp Lys Ala Asn Val Leu Gln
        195
                            200
                                                 205
Ser Ser Ile Leu Trp Arg Glu Ile Val Ser Glu Val Ala Lys Gln Tyr
                        215
                                            220
Pro Asp Val Ala Leu Ser His Met Tyr Ile Asp Asn Ala Thr Met Gln
                    230
                                        235
Leu Ile Lys Asp Pro Ser Gln Phe Asp Val Leu Leu Cys Ser Asn Leu
                245
                                    250
Phe Gly Asp Ile Leu Ser Asp Glu Cys Ala Met Ile Thr Gly Ser Met
            260
                                265
                                                     270
Gly Met Leu Pro Ser Ala Ser Leu Asn Glu Glu Gly Phe Gly Leu Tyr
        275
                            280
                                                 285
Glu Pro Ala Gly Gly Ser Ala Pro Asp Ile Ala Gly Lys Asn Ile Ala
                                            300
                        295
Asn Pro Ile Ala Gln Ile Leu Ser Leu Ala Leu Leu Arg Tyr Ser
                    310
                                        315
Leu Asp Ala Gly Asp Ala Ala Thr Ala Ile Glu Asn Ala Ile Asn Arg
                325
                                    330
Ala Leu Glu Glu Gly Val Arg Thr Gly Asp Leu Ala Arg Gly Thr Ala
            340
                                345
                                                     350
Ala Val Ser Thr Asp Glu Met Gly Asp Ile Ile Ala Arg Tyr Val Ala
                            360
Glu Gly Val
    370
<210> 9425
<211> 207
<212> PRT
<213> Enterobacter cloacae
<400> 9425
Asn Lys Glu Thr Ile Met Ala Glu Lys Phe Thr Gln His Thr Gly Arg
                                    10
Val Val Pro Leu Asp Ala Ala Asn Val Asp Thr Asp Ala Ile Ile Pro
                                25
Lys Gln Phe Leu Gln Lys Val Thr Arg Thr Gly Phe Gly Ala His Leu
                            40
Phe Asn Asp Trp Arg Phe Leu Asp Asp Lys Gly Glu Val Pro Asn Pro
```

55

Glu Phe Val Leu Asn Phe Pro Glu Tyr Lys Gly Ala Ser Ile Leu Leu

70 75 Ala Arg Glu Asn Phe Gly Cys Gly Ser Ser Arg Glu His Ala Pro Trp 90 Ala Leu Thr Asp Tyr Gly Phe Lys Val Val Ile Ala Pro Ser Phe Ala 100 105 Asp Ile Phe Tyr Gly Asn Ser Phe Asn Asn Gln Leu Leu Pro Val Thr 120 Leu Ser Asp Glu Gln Val Asp Glu Leu Phe Ala Leu Val Gln Ala Asn 135 Pro Gly Ile Ser Phe Glu Val Asp Leu Glu Ala Glu Val Val Lys Ala 155 150 Gly Asp Lys Thr Tyr Ser Phe Ser Ile Asp Ala Phe Arg Arg His Cys 170 Met Leu Asn Gly Leu Asp Ser Ile Gly Leu Thr Leu Gln His Glu Glu 185 Ala Ile Ala Ala Tyr Glu Lys Lys Gln Pro Ala Phe Met Gly <210> 9426 <211> 560 <212> PRT <213> Enterobacter cloacae <400> 9426 Phe Phe Val Arg Ser Ser Pro Phe Met Pro Ser Gly Arg Leu Gln Gln 10 Gln Phe Ile Arg Leu Trp Gln Cys Cys Glu Gly Gln Ser Gln Glu Thr 25 Thr Leu Asn Glu Leu Ala Glu Leu Leu Asn Cys Ser Arg Arg His Met 40 Arg Thr Leu Leu Asn Thr Met Gln Gln Gly Trp Leu Asn Trp Glu 55 Ala Glu Ala Gly Arg Gly Lys Arg Ser Arg Leu Thr Phe Leu Tyr Thr 70 75 Gly Leu Ala Leu Gln Gln Gln Arg Ala Glu Asp Leu Leu Glu Gln Asp 85 90 Arg Ile Asp Gln Leu Val Gln Leu Val Gly Asp Lys Ala Ala Val Arg 100 105 Gln Met Leu Val Ser His Leu Gly Arg Ser Phe Arg Gln Gly Arg His · 120 125 Ile Leu Arg Val Leu Tyr Tyr Arg Pro Met Lys Asn Leu Leu Pro Gly 135 140 Thr Ala Leu Arg Arg Ser Glu Thr His Met Ala Arg Gln Ile Phe Ser 150 155 Gly Leu Thr Arg Ile Asn Glu Glu Asn Gly Glu Leu Glu Ala Asp Ile 165 170 Ala His His Trp Gln Gln Leu Ser Pro Arg His Trp Arg Phe Phe Leu 185 Arg Pro Gly Ile His Phe His His Gly Arg Glu Leu Glu Met Arg Asp 200 Val Ile Asp Ser Leu Glu Arg Ala Arg Thr Leu Pro Leu Tyr Ser His 220 215 Ile Ala Arg Ile His Ser Pro Thr Ala Trp Thr Leu Asp Ile Glu Leu 230 235 Ser Gln Pro Asp Lys Trp Leu Pro Trp Leu Leu Gly Tyr Val Pro Ser 245 250 Met Ile Leu Pro Ala Glu Trp Arg Ser Leu Asn Asn Phe Ser Ser Gln 260 265 Pro Ile Gly Thr Gly Pro Tyr Ser Val Thr Arg Asn Asn Ser Asn Gln

275 280 285 Leu Lys Ile Arg Ala Phe Asp Asp Tyr Phe Gly Tyr Arg Ala Leu Ile

```
295
                                            300
Asp Glu Val Asn Val Trp Val Leu Pro Asp Leu Asn Glu Glu Leu Ser
                    310
                                        315
Ala Gly Leu Thr Leu Glu Gly Pro Thr Ala Gly Glu Lys Ala Phe Glu
                325
                                    330
Ser Arg Leu Glu Glu Gly Cys Tyr Tyr Leu Leu Phe Asp Ser Arg Ser
                                345
His Arg Gly Ala Asn His Asp Val Arg Arg Trp Ile Ser His Ile Leu
                            360
                                                 365
Ala Pro Ala Asn Leu Ile Tyr His Ala Glu Glu Gln Tyr Gln Thr Trp
                        375
                                            380
Trp Phe Pro Ala Tyr Gly Leu Leu Pro Arg Trp His His Ala Gln Pro
                    390
                                         395
Val Arg Ser Glu Lys Pro Ala Gly Leu Glu Thr Ile Thr Leu Ser Tyr
                405
                                    410
Tyr Arg Asp His Ile Glu His Arg Phe Ile Ala Arg Ile Met Ser Thr
                                425
            420
Leu Leu Ala Ala Glu Gly Val Thr Leu Ala Ile Gln Glu Val Asp Tyr
                            440
Asp Glu Trp His Arg Gly Asp Val Ile Ser Asp Ile Trp Leu Asn Ser
                        455
Ala Asn Phe Thr Leu Pro Leu Asp Phe Ser Leu Phe Ser His Leu Tyr
                                         475
                    470
Glu Val Pro Leu Ile Gln His Cys Ile Asn Arg Asp Trp Gln Gln Asp
                485
                                    490
Ala Ala Arg Trp Arg Ala Gly Glu Met Asp Leu Ala Ala Trp Cys Gln
            500
                                505
Glu Leu Leu Ala Gly Gln Thr Ile Val Pro Leu Ile His His Trp Leu
                            520
                                                 525
        515
Leu Ile Gln Gly Gln Arg Ser Met Arg Gly Leu Arg Met Asn Thr Leu
                        535
                                             540
Gly Trp Phe Asp Phe Lys Ser Ala Trp Phe Ala Pro Pro Glu Pro
                    550
                                         555
<210> 9427
<211> 349
<212> PRT
<213> Enterobacter cloacae
<400> 9427
Arg Arg Arg Asp Leu Arg Leu Ser Leu Lys Ile Leu Cys His Ser
                                    10
Thr Leu Arg Cys Lys Val Leu Lys Asn Val Leu Pro Leu Leu Ala Leu
            20
                                25
Phe Ala Leu Pro Val Phe Ala Lys Pro Val Leu Thr Val Tyr Thr Tyr
                            40
Asp Ser Phe Ser Ala Asp Trp Gly Pro Gly Pro Val Val Lys Lys Ala
                        55
                                            60
Phe Glu Ala Asp Cys Asn Cys Glu Leu Lys Phe Val Ala Leu Glu Asp
                    70
                                        75
Gly Val Ser Leu Leu Asn Arg Leu Arg Met Glu Gly Lys Asn Ser Lys
                                    90
Ala Asp Val Val Leu Gly Leu Asp Asn Asn Leu Leu Glu Ala Ala Thr
                                105
Gln Thr Arg Leu Phe Ala Lys Ser Gly Val Ala Ala Asp Ala Val Asn
                            120
Val Pro Gly Gly Trp Lys Asn Asp Thr Phe Val Pro Phe Asp Tyr Gly
                        135
                                            140
Tyr Phe Ala Phe Val Tyr Asp Lys Asn Lys Leu Lys Asn Pro Pro Lys
                   150
                                        155
```

Ser Leu Lys Glu Leu Val Glu Ser Asp Gln Lys Trp Arg Val Ile Tyr

```
165
                                    170
Glu Asp Pro Arg Thr Ser Thr Pro Gly Leu Gly Leu Leu Leu Trp Met
                                185
Gln Lys Val Tyr Gly Asp Lys Thr Pro Glu Ala Trp Gln Lys Leu Ala
                            200
Ala Lys Thr Val Thr Val Thr Lys Gly Trp Ser Glu Ala Tyr Gly Leu
                        215
                                             220
Phe Leu Lys Gly Glu Ser Asp Leu Val Leu Ser Tyr Thr Thr Ser Pro
                    230
                                        235
Ala Tyr His Ile Ile Ala Glu Lys Lys Asp Asn Tyr Ala Ala Ala Asn
                245
                                    250
Phe Ala Glu Gly His Tyr Leu Gln Val Glu Val Ala Ala Arg Thr Ala
                                265
                                                     270
            260
Ala Ser Lys Gln Pro Glu Leu Ala Glu Lys Phe Leu Lys Phe Met Ile
        275
                            280
                                                 285
Ser Pro Ala Phe Gln Asn Ala Ile Pro Thr Gly Asn Trp Met Tyr Pro
                        295
                                             300
Val Thr Asp Val Ala Leu Pro Ala Gly Phe Glu Gln Leu Asn Lys Pro
                    310
Gln Thr Ser Leu Glu Phe Thr Pro Gln Gln Val Ala Ala Gln Arg Ala
                                    330
Ala Trp Ile Ser Glu Trp Gln Arg Ala Val Ser Arg
            340
```

<211> 307

<212> PRT

<213> Enterobacter cloacae

<400> 9428

Ser Val Arg Trp Pro Arg Arg Trp Arg Leu Pro Ala Cys Cys Arg Leu 10 Ala Ile Leu Ala Leu Trp Pro Ser Ser Ala Thr Arg Ile Ser Ala Arg 25 Cys Arg Ser Gly Phe Ile Ser Lys Leu Ala Pro Ile Val Ala Arg Thr 40 Ala Pro Ser Arg Arg Tyr Ser Cys Cys Cys Cys Ala Leu Arg Tyr Leu 55 Pro Leu Ser Lys Asn Phe Arg Gly Val Met Leu Lys Leu Thr Asp Val 70 75 Thr Trp Leu Tyr Glu His Leu Pro Met Arg Phe Thr Leu Ser Val Arg 8.5 90 Gln Gly Glu Arg Ile Ala Val Leu Gly Pro Ser Gly Ala Gly Lys Ser 105 Thr Leu Leu Asn Leu Ile Ala Gly Phe Leu Gln Pro Ala Ser Gly Ser 120 125 Ile Val Ile Asp Asn Gly Glu Tyr Thr Tyr Ala Pro Pro Ala Lys Arg 135 140 Pro Val Ser Met Leu Phe Gln Glu Asn Asn Leu Phe Asn His Leu Thr 150 155 Val Trp Gln Asn Ile Ala Leu Gly Met Asp Pro Gly Leu Lys Leu Asn 165 170 Val Ala Gln Arg Gln Thr Leu Glu Ala Ile Ala Glu Gln Met Gly Leu 185 Ala Ala Phe Ile Asn Arg Leu Pro Gly Glu Leu Ser Gly Gly Gln Arg 200 Gln Arg Val Ala Leu Ala Arg Cys Leu Val Arg Lys Gln Pro Leu Leu 215 220 Leu Leu Asp Glu Pro Phe Ser Ala Leu Asp Pro Ala Leu Arg Gln Glu 230 235 Met Leu Ser Leu Val Glu Glu Val Cys Glu Arg Glu Gln Leu Thr Met

245 250 Leu Met Val Ser His Ser Ile Glu Asp Ala Ala Arg Ile Ala Pro Arg 265 Ser Val Val Ile Ala Glu Gly Arg Ile Leu Trp Asp Gly Glu Thr Glu 280 Glu Leu Leu Ser Gly Lys Ala Gly Ala Ser Ser Leu Leu Gly Ile Arg 295 290 Glu Val 305 <210> 9429 <211> 590 <212> PRT <213> Enterobacter cloacae <400> 9429 Arg Phe Leu Ser Leu Val Ser Asn Val Leu Pro Tyr Leu Phe Phe Gly Trp Ser Asn Thr Met Ala Ile Ala Ile Gly Leu Asp Phe Gly Ser Asp Ser Val Arg Ala Leu Ala Val Asp Cys Thr Thr Gly Gln Glu Ile Ala 40 Thr Ser Val Glu Trp Tyr Pro Arg Trp Gln Glu Gly Arg Tyr Cys Asp Ala Pro Asn Asn Gln Phe Arg His His Pro Arg Asp Tyr Ile Glu Ser Met Glu Ala Ala Ile Lys Thr Val Leu Ala Glu Leu Thr Asp Ala Gln Arg Ala Asp Val Val Gly Ile Gly Val Asp Ser Thr Gly Ser Thr Pro 105 Ala Pro Val Asp Ala Glu Gly Arg Val Leu Ala Leu Arg Pro Glu Phe 120 Ala Asp Asn Pro Asn Ala Met Phe Val Leu Trp Lys Asp His Thr Ala 135 140 Val Glu Glu Ala Glu Ala Ile Thr Arg Leu Cys Leu Gln Pro Gly Lys 1.50 155 Thr Asp Tyr Ser Arg Tyr Ile Gly Gly Ile Tyr Ser Ser Glu Trp Phe 170 165 Trp Ala Lys Ile Leu His Val Thr Arg Ala Asp Ala Ser Val Ala Gln 180 185 190 Ala Ala Ala Ser Trp Ile Glu Leu Cys Asp Trp Val Pro Ala Leu Leu 195 200 Ser Gly Thr Thr Arg Pro Gln Asp Ile Arg Arg Gly Arg Cys Ser Ala 215 220 Gly His Lys Ser Leu Trp His Glu Ser Trp Gly Gly Leu Pro Pro Ala 230 235 Ala Phe Phe Asp Glu Leu Asp Pro Ile Ile Asn Lys Asn Leu Thr Tyr 245 250 Pro Leu Phe Thr Asp Thr Phe Thr Ala Asp Ile Pro Val Gly Thr Leu 260 265 270 Cys Glu Glu Trp Ala Lys Arg Leu Gly Leu Pro Gln Asn Val Thr Ile 280 Ser Gly Gly Ala Phe Asp Cys His Met Gly Ala Val Gly Ala Gly Ala 295 Gln Pro Asn Thr Leu Val Lys Val Ile Gly Thr Ser Thr Cys Asp Ile 315 310 Leu Thr Ala Asp Lys Ala Ser Val Gly Asp Arg Ala Val Lys Gly Ile 330 Cys Gly Gln Val Asp Gly Ser Val Val Pro Asp Phe Ile Gly Leu Glu 345

Ala Gly Gln Ser Ala Phe Gly Asp Ile Tyr Ala Trp Phe Gly Arg Val

```
360
Leu Gly Trp Pro Leu Asp Gln Leu Ala Ala Ala His Pro Glu Leu Lys
                        375
Thr Gln Ile Thr Ala Ser Lys Lys Gln Leu Leu Pro Gln Leu Thr Asp
                    390
                                         395
Ala Trp Ala Lys Asn Pro Ser Leu Asp His Leu Pro Val Val Leu Asp
                405
                                    410
Trp Phe Asn Gly Arg Arg Thr Pro Phe Ala Asn Gln Arg Leu Lys Gly
            420
                                425
Val Ile Thr Asp Leu Asn Leu Ala Thr Asp Ala Pro Ala Leu Phe Gly
                            440
Gly Leu Ile Ala Ala Thr Ala Phe Gly Ala Arg Ala Ile Met Glu Cys
                        455
                                             460
Phe Ile Asp Gln Gly Ile Asp Val Asn Asn Val Met Ala Leu Gly Gly
                    470
                                         475
Ile Ala Arg Lys Asn Pro Val Ile Met Gln Ala Cys Cys Asp Val Leu
                485
                                     490
Asn Arg Pro Leu Gln Ile Val Ala Ser Asp Gln Cys Cys Ala Leu Gly
                                505
Ala Ala Ile Phe Ala Ala Val Ala Ala Gly Val His Ala Asp Ile Pro
                            520
Thr Ala Gln Gln His Met Ala Ser Ala Val Glu Asn Thr Leu His Pro
                        535
Gln Thr Gln Gln Ala Gln Arg Phe Glu Gln Leu Tyr Gln Arg Tyr Gln
                    550
                                         555
Gln Trp Ala Lys Ser Ala Glu Leu His Tyr Leu Pro Val Ala Ala Pro
                565
                                    570
Ala Lys Ser Thr Ala Asp Thr Thr Ala Thr Leu Thr His
```

<211> 276 <212> PRT

<213> Enterobacter cloacae

<400> 9430

Arg Arg Ala Ala Leu Glu Arg Ser Leu Leu Arg Phe Lys Thr Leu Ser 10 Pro Glu Cys Pro Val Ala Leu Arg Leu Pro Gly Leu Arg Phe Cys Arg 20 25 Pro Asp Lys Arg Ser Ala Ile Trp Gln Glu Thr Thr Met Leu Glu Asp 40 Leu Lys Arg Gln Val Leu Glu Ala Asn Leu Ala Leu Pro Lys His Asn 55 60 Leu Val Thr Leu Thr Trp Gly Asn Val Ser Ala Val Asp Arg Glu Lys 70 75 Gly Val Phe Val Ile Lys Pro Ser Gly Val Asp Tyr Thr Val Met Thr 85 90 Ala Glu Asp Met Val Val Val Ser Ile Glu Thr Gly Glu Val Val Glu 105 Gly Lys Lys Pro Ser Ser Asp Thr Pro Thr His Arg Leu Leu Tyr 120 Gln Ala Phe Pro Thr Ile Gly Gly Ile Val His Thr His Ser Arg His 135 140 Ala Thr Ile Trp Ala Gln Ala Gly Gln Pro Ile Pro Ala Thr Gly Thr 150 155 Thr His Ala Asp Tyr Phe Tyr Gly Thr Ile Pro Cys Thr Arg Leu Met 170 165 Thr Asp Ala Glu Ile Asn Gly Glu Tyr Glu Trp Glu Thr Gly Asn Val 185 Ile Val Glu Thr Phe Glu Lys Gln Gly Ile Asp Ala Ala Gln Met Pro

200 Gly Val Leu Val His Ser His Gly Pro Phe Ala Trp Gly Lys Asn Ala 220 215 Glu Asp Ala Val His Asn Ala Ile Val Leu Glu Glu Val Ala Tyr Met 230 235 Gly Ile Phe Cys Arg Gln Leu Ala Pro Gln Leu Pro Asp Met Gln Gln 250 245 Thr Leu Leu Asp Lys His Tyr Leu Arg Lys His Gly Ala Lys Ala Tyr 265 Tyr Gly Gln 275 <210> 9431 <211> 838 <212> PRT <213> Enterobacter cloacae <400> 9431 Thr Phe Ala Arg Cys Arg Cys Ala Tyr Arg Asp Cys Gly Thr Cys Arg 10 Pro Asp Lys Arg Ser Ala Ile Arg Leu Asn Arg His Cys Ile Lys Pro 20 25 Gln Gln Thr Pro Leu Asn Gln Ala Ile Ile Arg Pro Gly Phe Val Leu 40 Trp Asp Asn Ala Val Thr Gln Ala Gln Glu Gly Phe Leu Leu Thr Arg 55 His Trp Arg Asp Thr Pro Gln Gly Thr Glu Val Glu Phe Trp Leu Ala 70 75 Thr Asp Asn Gly Pro Leu Asn Val Thr Leu Pro Pro Gln Glu Ser Val 85 90 Ala Phe Ile Pro Glu Ala His Val Glu Lys Val Lys Gln Leu Leu Arg 105 100 Gly Glu Asn Gly Trp Arg Ile Thr Pro Leu Glu Leu Lys Asp Phe His 120 125 Arg Gln Pro Val Tyr Gly Leu Tyr Cys Arg Ala His Arg Gln Leu Met 135 140 Arg Tyr Glu Lys Leu Leu Arg Glu Ala Gly Val Thr Leu Tyr Glu Ala 150 155 Asp Ile Arg Pro Pro Glu Arg Phe Leu Met Glu Arg Phe Ile Thr Ala 165 170 Pro Val Trp Val Asp Gly Thr Ala Gln Asn Gly Arg Ile Val Asn Ala 185 Arg Leu Lys Pro Ser Pro Asn Tyr Arg Pro Pro Leu Lys Trp Val Ser 200 205 Leu Asp Ile Glu Thr Thr Arg His Gly Glu Leu Tyr Cys Ile Gly Leu 215 220 Glu Gly Cys Gly Gln Arg Val Val Tyr Met Leu Gly Pro Pro Asn Gly 235 Asp Ala Ser Ala Leu Asp Phe Asn Leu Glu Tyr Val Asn Ser Arg Pro 245 250 Gln Leu Leu Glu Lys Leu Asn Gln Trp Phe Ala Glu His Asp Pro Asp 265 Val Leu Ile Gly Trp Asn Val Val Gln Phe Asp Leu Arg Val Leu Gln 280 Lys His Ala Glu Arg Tyr Arg Ile Pro Leu Met Leu Gly Arg Gly Asn 300 295 Ser Glu Leu Glu Trp Arg Glu His Gly Phe Lys Asn Gly Val Phe Phe 310 315 Ala Gln Ala Asn Gly Arg Leu Ile Ile Asp Gly Ile Glu Ala Leu Lys 325 330

Ser Ala Phe Trp Asn Phe Ser Ser Phe Ser Leu Glu Ala Val Ala Gln

			340					345					350		
Glu	Leu	Leu 355		Glu	Gly	Lys	Ser 360		Asp	Asn	Pro	Trp 365		Arg	Met
Asp	Glu 370	Ile	Asp	Arg	Arg	Phe 375	Asn	Glu	Asp	Lys	Pro 380	Ala	Leu	Ala	Thr
Tyr 385	Aśn	Leu	Lys	Asp	Cys 390	Glu	Leu	Val	Thr	Gln 395	Ile	Phe	His	Lys	Thr 400
				405				_	Ala 410					415	
	_	_	420	_	_			425	Ala				430	_	
		435					440		Ala			445			
	450					455			Val		460				
465	_	_			470				Tyr	475					480
		_		485					Val 490					495	
			500					505	Glu				510		
		515		_		_	520		Glu			525			_
	530	_	_			535	_		Gly		540				
545		_			550				Tyr	555			_		560
	-	_		565					570					575	Arg
_			580		_			585	Ala Ser				590	_	_
_	_	595		_	_	_	600	_	Gln			605			
	610				-	615			Ser		620				
625					630				Thr	635					640
				645					650 Gly				_	655	
			660	_			_	665	Arg				670		
		675					680		Leu			685			
	690		-		_	695			Glu		700				
705					710				Gly	715					720
_	_			725					730 Leu					735	
	-	-	740	-		_	-	745	Leu			_	750	_	
		755			-		760	_	Asn		_	765			
	770					775			Val		780				
785	_				790				Gln	795	_			•	800
				805					810 Phe					815	
- 1			820	_	_		1-	825	_		_		830	_	_

Gln Leu Gly Leu Phe 835 <210> 9432 <211> 268 <212> PRT <213> Enterobacter cloacae <400> 9432 Ala Glu Ser Leu Ile Arg Phe Leu Thr Gly Ile Val Met Gln Ala Leu 10 Leu Glu His Phe Ile Thr Gln Ser Val Met Tyr Ser Leu Ile Ala Val 20 Ala Leu Val Ala Phe Leu Glu Ser Leu Ala Leu Val Gly Leu Ile Leu Pro Gly Thr Val Met Met Ala Gly Leu Gly Ala Leu Ile Gly Ser Gly Glu Val Asn Phe Trp Gln Ala Trp Met Ala Gly Ile Ile Gly Cys Leu Leu Gly Asp Trp Ile Ser Phe Trp Leu Gly Trp Arg Phe Lys Lys Pro 85 90 Leu His Arg Trp Ser Phe Met Lys Lys Asn Lys Ala Leu Leu Asp Lys 100 105 Thr Glu His Ala Leu His Gln His Ser Met Phe Thr Ile Leu Val Gly 115 120 125 Arg Phe Val Gly Pro Thr Arg Pro Leu Val Pro Met Val Ala Gly Met 135 140 Leu Asp Leu Pro Val Ala Lys Phe Val Val Pro Asn Ile Ile Gly Cys 150 155 Val Phe Trp Pro Pro Phe Tyr Phe Leu Pro Gly Ile Leu Ala Gly Ala 170 165 Ala Ile Asp Ile Pro Asp Gly Met Gln Ser Gly Glu Phe Lys Trp Leu 185 180 190 Leu Leu Gly Thr Ala Val Leu Leu Trp Leu Ala Val Trp Leu Cys Trp 200 195 205 Arg Leu Trp Arg Ser Ala Lys Ala Ser Val Asp Arg Leu Thr Arg Tyr 215 220 Leu Pro Arg Thr Arg Leu Leu Trp Leu Ala Pro Leu Thr Leu Gly Val 230 235 Ala Val Val Ala Leu Ile Ala Leu Ile Arg His Pro Leu Met Pro Val 245 250 Tyr Gly Glu Ile Leu Leu Lys Val Val Ser Arg 260 <210> 9433 <211> 421 <212> PRT <213> Enterobacter cloacae <400> 9433 Ser Pro Ala Ser Lys Met Phe Phe Ala Gly Phe Phe Arg Leu Leu Phe His Pro Ile Ser Ile Arg Phe His Lys Asp Leu Arg Met Leu Trp Leu Met Thr Met Gly Arg Arg Leu Asn Gly Val Tyr Ala Ala Phe Met Leu 40 Val Ala Phe Met Met Gly Val Ala Gly Ala Leu Gln Ala Pro Thr Leu

Ser Leu Phe Leu Ser Arg Glu Val Gly Ala Gln Pro Phe Trp Val Gly

Leu Phe Tyr Thr Val Asn Ala Ile Ala Gly Ile Leu Val Ser Leu Trp

75

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90
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Leu Ala Lys Arg Ser Asp Ser Gln Gly Asp Arg Arg Lys Leu Ile Leu
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                                105
Phe Cys Cys Ala Met Ala Val Gly Asn Ala Leu Leu Phe Ala Phe Asn
        115
                            120
                                                 125
Arg His Tyr Leu Thr Leu Ile Thr Cys Gly Val Leu Leu Ala Ser Leu
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                                            140
Ala Asn Thr Ala Met Pro Gln Leu Phe Ala Leu Ala Arg Glu Tyr Ala
                    150
                                        155
Asp Asn Ser Ala Arg Glu Val Val Met Phe Ser Ser Val Met Arg Ala
                165
                                    170
Gln Leu Ser Leu Ala Trp Val Ile Gly Pro Pro Leu Ala Phe Met Leu
                                185
Ala Leu Asn Tyr Gly Phe Thr Thr Met Phe Ser Ile Ala Ala Gly Ile
                            200
        195
Phe Val Ile Ser Leu Ala Leu Ile Ala Phe Ala Leu Pro Ser Val Ala
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                                            220
Arg Val Glu Gln Val Thr Asp Lys Pro Ile Thr Gln Val Ser Gly Trp
                    230
                                         235
Gln Asp Lys Asn Val Arg Met Leu Phe Ile Ala Ser Thr Leu Thr Trp
                                    250
                245
Thr Cys Asn Thr Met Tyr Ile Ile Asp Met Pro Leu Trp Ile Ser Ser
            260
                                265
Asp Leu Gly Leu Pro Asp Lys Leu Ala Gly Ile Leu Met Gly Thr Ala
        275
                            280
Ala Gly Leu Glu Ile Pro Ala Met Ile Leu Ala Gly Tyr Tyr Val Lys
                        295
                                            300
Arg Phe Gly Lys Arg Lys Met Met Val Val Ala Val Ala Ala Gly Val
                    310
                                        315
Leu Phe Tyr Leu Gly Leu Ile Leu Phe His Ser Arg Glu Ala Leu Leu
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                                    330
Ala Leu Gln Leu Phe Asn Ala Val Phe Ile Gly Ile Val Ala Gly Ile
                                345
Gly Met Leu Trp Phe Gln Asp Leu Met Pro Gly Arg Ala Gly Ser Ala
                            360
                                                 365
Thr Thr Leu Phe Thr Asn Ser Ile Ser Thr Gly Val Ile Leu Ala Gly
                        375
                                            380
Val Ile Gln Gly Ala Leu Ala Gln Ser Tyr Gly His Gly Ser Val Tyr
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Trp Met Ile Ala Ile Ser Val Val Thr Leu Gly Leu Thr Cys Arg
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Val Lys Asp Val
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<211> 171

<212> PRT

<213> Enterobacter cloacae

#### <400> 9434

90 Lys Ile Gln Ala Ser Gly Tyr Gly Arg Glu Glu Val Lys Arg Asn Thr 105 Asp Ile Phe Arg Gly Gln Ile Ile Asp Val Thr Pro Ser Ile Tyr Thr 120 125 Val Gln Leu Ala Gly Thr Ser Asp Lys Leu Asp Ala Phe Leu Ala Ser 135 140 Val Arg Asp Val Ala Lys Ile Val Glu Val Ala Arg Ser Gly Val Val 150 155 Gly Leu Ser Arg Gly Asp Lys Ile Met Arg 165 <210> 9435 <211> 133 <212> PRT <213> Enterobacter cloacae <400> 9435 Phe Ser Ala Ala Tyr Cys Arg Glu Asp Glu Arg Met Ile Ser Arg Val Thr Glu Thr Leu Ser Lys Val Lys Gly Ser Leu Gly Ser Asn Glu Arg His Ala Leu Pro Gly Val Ile Gly Asp Asp Leu Leu Arg Phe Gly Lys 4.5 Leu Pro Leu Cys Leu Phe Ile Cys Ile Ile Val Thr Ala Val Met Val 60 Val Thr Thr Ala His His Thr Arg Leu Leu Thr Ala Gln Arg Glu Gln 75 Met Val Leu Glu Arg Asp Ala Leu Asp Ile Glu Trp Arg Asn Leu Ile 85 90 Leu Glu Glu Asn Ala Leu Gly Asp His Ser Arg Val Glu Arg Ile Ala 105 Thr Glu Lys Leu Gln Leu Gln His Val Asp Pro Ser Gln Glu Asn Ile 115 120 Val Val Gln Lys 130 <210> 9436 <211> 594 <212> PRT <213> Enterobacter cloacae <400> 9436 Gly Lys Thr Arg Arg Met Lys Ala Ala Lys Thr Leu Lys Pro Lys 10 Arg Gln Glu Gln Ala Asn Phe Val Ser Trp Arg Phe Ala Leu Leu 25 Cys Gly Cys Ile Leu Leu Ala Leu Gly Phe Leu Leu Gly Arg Val Ala Trp Leu Gln Ile Ile Ala Pro Asp Met Leu Val Arg Gln Gly Asp Met Arg Ser Leu Arg Val Gln Glu Val Ser Thr Ser Arg Gly Met Ile Thr Asp Arg Ser Gly Arg Pro Leu Ala Val Ser Val Pro Val Lys Ala Ile 90 Trp Ala Asp Pro Lys Glu Leu His Asp Ala Gly Gly Ile Thr Leu Asp 105 Asn Arg Trp Lys Ala Leu Ser Asp Ala Leu Lys Met Pro Leu Asp Gln 115 120 125 Leu Ala Ser Arg Val Asn Ala Asn Pro Lys Gly Arg Phe Ile Tyr Leu 135 140

Ala Arg Gln Val Asn Pro Asp Met Ala Asp Tyr Ile Lys Lys Leu Lys 150 155 Leu Pro Gly Ile His Leu Arg Glu Glu Ser Arg Arg Tyr Tyr Pro Ser 165 170 Gly Glu Val Thr Ala His Leu Ile Gly Phe Thr Asn Val Asp Ser Gln 180 185 Gly Ile Glu Gly Val Glu Lys Ser Phe Asp Lys Trp Leu Thr Gly Gln 200 Pro Gly Glu Arg Ile Val Arg Lys Asp Arg Tyr Gly Arg Val Ile Glu 215 220 Asp Ile Ser Ser Thr Asp Ser Gln Ala Ala His Asn Leu Ala Leu Ser 230 235 Ile Asp Glu Arg Leu Gln Ala Leu Val Tyr Arg Glu Leu Asn Asn Ala 245 250 Val Ala Phe Asn Lys Ala Glu Ser Gly Ser Ala Val Leu Val Asp Val 265 Ala Thr Gly Glu Val Leu Ala Met Ala Ser Ser Pro Ser Tyr Asn Pro 275 280 Asn Asn Phe Ala Gly Thr Ala Lys Asp Ala Met Arg Asn Arg Ser Ile 295 300 Thr Asp Val Phe Glu Pro Gly Ser Thr Val Lys Pro Met Val Val Met 315 310 Thr Ala Leu Gln Arg Gly Ile Val Asn Glu Asn Thr Val Leu Asn Thr 330 325 Ile Pro Tyr Arg Ile Asn Gly His Glu Ile Lys Asp Val Ala Arg Tyr 345 340 Ser Glu Leu Thr Leu Thr Gly Val Leu Gln Lys Ser Ser Asn Val Gly 360 Val Ser Lys Leu Ala Leu Ala Met Pro Ser Ser Ala Leu Val Asp Thr 375 380 Tyr Ser Arg Phe Gly Leu Gly Lys Ala Thr Asn Leu Gly Leu Val Gly 390 395 Glu Arg Ser Gly Leu Tyr Pro Gln Lys Gln Arg Trp Ser Asp Ile Glu 405 410 Arg Ala Thr Phe Ser Phe Gly Tyr Gly Leu Met Val Thr Pro Leu Gln 420 425 Leu Ala Arg Val Tyr Ala Thr Ile Gly Ser Tyr Gly Ile Tyr Arg Pro 435 440 445 Leu Ser Ile Thr Lys Val Asp Pro Pro Val Pro Gly Glu Arg Val Phe 455 460 Pro Glu Ser Ile Val Arg Thr Val Val His Met Met Glu Ser Val Ala 470 475 Leu Pro Gly Gly Gly Val Lys Ala Ala Ile Lys Gly Tyr Arg Ile 485 490 Ala Ile Lys Thr Gly Thr Ala Lys Lys Val Gly Pro Asp Gly Arg Tyr 505 510 Ile Asn Lys Tyr Ile Ala Tyr Thr Ala Gly Val Ala Pro Ala Ser Asn 520 Pro Arg Phe Ala Leu Val Val Val Ile Asn Asp Pro Gln Ala Gly Lys 535 540 Tyr Tyr Gly Gly Ala Val Ser Ala Pro Val Phe Gly Ala Ile Met Gly 550 555 Gly Val Leu Arg Thr Met Asn Ile Glu Pro Asp Ala Leu Ala Thr Gly 565 570 Glu Lys Ser Glu Phe Val Ile Asn Gln Gly Glu Gly Thr Gly Gly Arg 580 585 Ser

<212> PRT <213> Enterobacter cloacae

<400> 9437 Arg Leu Ser Asp Cys Arg Gln Ser Ser Ser Gly Leu Leu Arg Pro Arg Asp Gly Ser Ala Ser Ala Gly Ser Gly Gly Met Ile Ser Ile Thr Leu 20 25 Ser Gln Ala Ala Ala Val Leu Gln Gly Met Leu His Gly Gln Asp Leu Thr Ile Glu Ala Val Thr Thr Asp Thr Arg Lys Val Thr Ala Gly Cys Leu Phe Val Ala Leu Lys Gly Glu Arq Phe Asp Ala His Asp Phe Ala 70 75 Gln Gln Ala Lys Asp Asn Gly Ala Gly Ala Leu Leu Val Ser Arg Lys Leu Asp Ile Asp Leu Pro Gln Ile Val Val Lys Asp Thr Arg Leu Ala 105 Phe Gly Glu Leu Ala Ala Trp Val Arg Gln Gln Val Pro Thr Arg Val 115 120 Val Ala Leu Thr Gly Ser Ser Gly Lys Thr Ser Val Lys Glu Met Thr 135 140 Ala Ala Ile Leu Ser Gln Cys Gly Asn Thr Leu Tyr Thr Ala Gly Asn 150 155 Leu Asn Asn Asp Ile Gly Val Pro Met Thr Leu Leu Arg Leu Thr His 165 170 Glu His Glu Tyr Ala Val Ile Glu Leu Gly Ala Asn His Gln Gly Glu 180 185 Ile Ala Trp Thr Val Ser Leu Thr Arg Pro Glu Ala Ala Leu Val Asn 200 195 Asn Leu Ala Ala His Leu Glu Gly Phe Gly Ser Leu Ala Gly Val 220 215 Ala Lys Ala Lys Gly Glu Ile Tyr Thr Gly Leu Pro Asp Asp Gly Ile 230 235 Ala Ile Met Asn Ala Asp Asn Asn Asp Trp Leu Asn Trp Gln Ser Ile 245 250 Ile Gly Ser Arg Lys Thr Trp Arg Phe Ser Pro Asn Ala Ala Asn Ser 265 260 Asp Phe Ser Ala Thr Asn Ile His Val Thr Ser His Gly Thr Glu Phe 280 Thr Leu Thr Thr Pro Thr Gly Asp Ile Asp Val Leu Leu Pro Leu Pro 295 300 Gly Arg His Asn Ile Ala Asn Ala Leu Ala Ala Ala Leu Ser Met 315 310 Ala Val Gly Ala Ser His Ala Ala Ile Lys Ala Gly Leu Ala Asn Leu 325 330 Lys Ala Val Pro Gly Arg Leu Phe Pro Ile Gln Leu Ala Glu Asn Lys 345 Leu Leu Leu Asp Asp Ser Tyr Asn Ala Asn Val Gly Ser Met Thr Ala 360 Ala Val Gln Val Leu Ser Glu Met Pro Gly Tyr Arg Val Met Val Val 375 Gly Asp Met Ala Glu Leu Gly Asp Glu Ser Glu Ala Cys His Val Gln 390 395 Val Gly Glu Ala Ala Lys Ala Ala Gly Leu Asp Arg Val Leu Ser Ala 410 Gly Pro Leu Ser Lys Ala Ile Ser Asp Ala Ser Glu Val Gly Glu His 425 Phe Ala Asp Lys Ser Ala Leu Ile Glu Arg Leu Lys Ala Leu Ile Thr 440 Glu Lys Gln Ile Val Thr Val Leu Val Lys Gly Ser Arg Ser Ala Ala

455 Met Glu Glu Val Val His Ala Leu Gln Glu Asn Gly Thr Cys 470 <210> 9438 <211> 426 <212> PRT <213> Enterobacter cloacae <400> 9438 Cys Leu Tyr Pro Pro Gly Glu Gly Val Arg Leu Met Arg Leu Ser Leu Pro Arg Leu Lys Met Pro Arg Leu Pro Gly Phe Gly Ile Leu Val Trp 20 Leu Phe Thr Ala Leu Lys Gly Trp Val Met Ala Ser Arg Asp Lys Asp 40 Ser Asp Ser Leu Ile Met Tyr Asp Arg Thr Leu Phe Trp Leu Thr Leu Gly Leu Ala Ala Ile Gly Phe Ile Met Val Thr Ser Ala Ser Met Pro 70 Val Gly Gln Arg Leu Ala Asn Asp Pro Phe Leu Phe Ala Lys Arg Asp 85 Gly Leu Tyr Ile Ile Leu Ala Phe Cys Leu Ala Leu Ile Thr Leu Arg 100 105 Leu Pro Met Ser Phe Trp Gln Arg His Ser Thr Ala Met Leu Ile Ala 120 Ser Ile Ile Met Leu Leu Ile Val Leu Val Val Gly Ser Ser Val Asn 135 140 Gly Ala Ser Arg Trp Ile Ala Phe Gly Pro Leu Arg Ile Gln Pro Ala 150 155 Glu Phe Thr Lys Leu Ser Leu Phe Cys Tyr Leu Ala Asn Tyr Leu Val 170 165 Arg Lys Val Asp Glu Val Arg Asn Asn Leu Arg Gly Phe Leu Lys Pro 185 180 Met Gly Val Ile Leu Val Leu Ala Ile Leu Leu Leu Ala Gln Pro Asp 200 205 Leu Gly Thr Val Val Val Leu Phe Val Thr Thr Leu Ala Met Leu Phe 215 220 Leu Ala Gly Ala Lys Leu Trp Gln Phe Ile Ala Ile Ile Gly Met Gly 230 235 Ile Ser Ala Val Val Leu Leu Ile Leu Ala Glu Pro Tyr Arg Ile Arg 245 250 Arg Val Thr Ser Phe Trp Asn Pro Trp Glu Asp Pro Phe Gly Ser Gly 265 260 Tyr Gln Leu Thr Gln Ser Leu Met Ala Phe Gly Arg Gly Glu Val Trp 280 285 Gly Gln Gly Leu Gly Asn Ser Val Gln Lys Leu Glu Tyr Leu Pro Glu 295 300 Ala His Thr Asp Phe Ile Phe Ser Ile Ile Gly Glu Glu Leu Gly Tyr 310 315 Ile Gly Val Val Leu Ala Leu Leu Met Val Phe Phe Val Ala Phe Arg 330 Ala Met Ser Ile Gly Arg Lys Ala Leu Glu Ile Asp His Arg Phe Ser 345 Gly Phe Leu Ala Cys Ser Ile Gly Ile Trp Phe Ser Phe Gln Ala Leu 360 Val Asn Val Gly Ala Ala Ala Gly Met Leu Pro Thr Lys Gly Leu Thr 375 380 Leu Pro Leu Ile Ser Tyr Gly Gly Ser Ser Leu Leu Ile Met Ser Thr 390 395 Ala Ile Met Phe Leu Leu Arg Ile Asp Tyr Glu Thr Arg Leu Glu Lys

405 415 Ala Gln Ala Phe Thr Arg Gly Ser Arg 420 <210> 9439 <211> 188 <212> PRT <213> Enterobacter cloacae <400> 9439 Leu Tyr Val Phe Trp Thr Arg Arg Ala Asp Met Ser Gln Ala Ala Leu Asn Thr Arg Asn Arg Asp Asp Glu Glu Glu Tyr Ser Ser Ser Arg Arg Ser Asn Gly Thr Arg Leu Ala Gly Ile Ile Phe Leu Leu Gly Val Leu 40 Cys Thr Val Phe Ile Ser Gly Trp Met Val Leu Gly Trp Met Glu Asp Ala Gln Arg Leu Pro Leu Ser Lys Leu Val Val Thr Gly Glu Arg His Tyr Thr Arg Asn Asp Asp Ile Arg Gln Ser Ile Leu Ala Leu Gly Ser 85 Pro Gly Thr Phe Met Thr Gln Asp Val Asn Ile Ile Gln Ser Gln Ile 100 105 Glu Arg Leu Pro Trp Ile Lys Gln Ala Ser Val Arg Lys Gln Trp Pro 120 125 Asp Glu Leu Lys Ile His Leu Val Glu Tyr Val Pro Ile Ala Arg Trp 135 140 Asn Asp Gln His Met Val Asp Val Asp Gly Asn Ser Phe Ser Val Pro 150 155 Ser Asp Arg Val Asn Lys Gln Asn Leu Pro Met Leu Tyr Gly Pro Ala 165 170 Val Ile Glu Asn Arg Arg Ile Pro Gly Phe Ser <210> 9440 <211> 337 <212> PRT <213> Enterobacter cloacae <400> 9440 Ile Ile Phe Phe Glu Val Ile Thr Val Pro Trp Gln Arg Glu Phe Ser 10 Val Thr Val Glu Ser Glu Met Pro Glu Asn Asn Ile Asn Gln Pro Gln 25 Thr Tyr Asp Gly Val Lys Pro Gln Leu Arg Thr Val Asp Leu Asn Leu 40 Leu Thr Val Phe Asp Ala Val Met Gln Glu Gln Asn Ile Thr Arg Ala Ala Gln Ser Leu Gly Met Ser Gln Pro Ala Val Ser Asn Ala Val Ala Arg Leu Lys Val Met Phe Asn Asp Glu Leu Phe Val Arg Tyr Gly Arg Gly Ile Gln Pro Thr Ala Arg Ala Phe Gln Leu Phe Gly Ser Ile Arg 105 Gln Ala Leu Gln Leu Val Gln Asn Glu Leu Pro Gly Ser Gly Phe Glu 120 125 Pro Leu Ser Ser Glu Arg Val Phe His Leu Cys Val Cys Ser Pro Leu

135

150

Asp Asn Tyr Leu Thr Ser Val Ile Tyr Asn Lys Val Glu Gln Ile Ala

140

155

Pro Asn Ile His Leu Val Phe Lys Ser Ser Leu Asn Gln Asn Thr Glu 165 170 His Gln Leu Arg Tyr Gln Glu Thr Glu Phe Val Leu Gly Tyr Glu Glu 180 185 Phe Arg Arg Pro Glu Phe Ala Cys Val Pro Leu Phe Lys Asp Glu Met 195 200 205 Val Leu Val Ala Ser Lys Lys His Pro Arg Met Asn Ser Pro Leu Arg 215 220 Glu Ser Asp Val Tyr Ser Glu Gln His Ala Val Val Ala Leu Asp Arg 230 235 Tyr Ala Ser Phe Ser Leu Pro Trp Tyr Asp Thr Ala Asp Lys Gln Ala 245 250 Ser Val Ala Tyr Gln Gly Met Ala Met Val Ser Val Leu Asn Val Val Ser Gln Thr Gln Leu Val Ala Ile Ala Pro Arg Trp Leu Ala Glu Glu 280 Phe Ser Asp Ser Leu Ser Leu Gln Ile Leu Pro Leu Pro Leu Lys Leu 295 Asn Ser Arg Thr Cys Tyr Leu Ser Trp His Glu Ala Ala Gly Arg Asp 310 315 Lys Gly His Gln Trp Met Glu Glu Leu Leu Val Asn Ile Cys Arg Arg 325 330

<210> 9441

<211> 329

<212> PRT

<213> Enterobacter cloacae

<400> 9441

Phe Arg Asn Ile Ile Gly Thr Ala Ala Gly Leu Val Ser Ile Asn Met 10 Met Glu Asn Tyr Lys His Thr Thr Val Leu Leu Asp Glu Ala Val Asn 20 25 Gly Leu Asn Ile Arg Pro Asp Gly Ile Tyr Ile Asp Gly Thr Phe Gly 40 4.5 Arg Gly Gly His Ser Arg Leu Ile Leu Ser Gln Leu Gly Ala Glu Gly 55 60 Arg Leu Leu Ala Ile Asp Arg Asp Pro Gln Ala Ile Ala Val Ala Gln 70 75 Thr Ile Asp Asp Pro Arg Phe Ser Ile Val His Gly Pro Phe Ser Ala 85 90 Leu Ala Asp Tyr Val Ala Glu Arg Gly Leu Thr Gly Lys Ile Asp Gly 105 Ile Leu Leu Asp Leu Gly Val Ser Ser Pro Gln Leu Asp Asp Ala Glu 120 Arg Gly Phe Ser Phe Met Arg Asp Gly Pro Leu Asp Met Arg Met Asp 135 Pro Thr Arg Gly Gln Ser Ala Ala Glu Trp Leu Gln Thr Ala Asp Glu 155 Ala Asp Ile Ala Trp Val Ile Lys Thr Phe Gly Glu Glu Arg Phe Gly 170 165 Lys Arg Ile Ala Arg Ala Ile Val Glu Arg Asn Arg Val Glu Pro Met 185 Thr Arg Thr Lys Glu Leu Ala Glu Val Ile Ala Ala Ala Thr Pro Val 200 205 Lys Asp Lys His Lys His Pro Ala Thr Arg Thr Phe Gln Ala Val Arg 215 220 Ile Trp Val Asn Ser Glu Leu Glu Glu Ile Glu Leu Ala Leu Lys Ser 230 235

Ser Leu Asp Val Leu Ala Pro Gly Gly Arg Leu Ser Ile Ile Ser Phe 245 250 His Ser Leu Glu Asp Arg Ile Val Lys Arg Phe Met Arg Glu Gln Ser 260 265 Arg Gly Pro Gln Val Pro Ala Gly Leu Pro Met Thr Glu Glu Gln Leu 280 Arg Lys Leu Gly Gly Arg Gln Leu Arg Ala Leu Gly Lys Leu Met Pro 295 300 Gly Glu Glu Val Ala Glu Asn Pro Arg Ala Arg Ser Ser Val Leu 310 315 Arg Ile Ala Glu Arg Thr Asn Ala 325

<210> 9442

<211> 503

<212> PRT

<213> Enterobacter cloacae

<400> 9442 Leu Ile Lys Ala Arg Glu Gln Val Ala Asp Arg Asn Leu Arg Asp Leu Leu Ala Pro Trp Val Pro Met Leu Pro Ala Arg Ala Leu Arg Glu, Met 25 Val Leu Asp Ser Arg Val Ala Ala Ser Gly Asp Leu Phe Val Ala Val Val Gly His Gln Ala Asp Gly Arg Arg Tyr Ile Pro Gln Ala Ile Ala 55 Gln Gly Val Ala Ala Ile Ile Ala Glu Ala Lys Asp Glu Ala Thr Asp 70 75 Gly Glu Ile Arg Glu Met His Gly Val Pro Val Ile Tyr Leu Ser Gln 85 Leu Asn Glu Arg Leu Ser Ala Leu Ala Gly Arg Phe Tyr Asn Glu Pro 1.00 105 Ser Asp Gln Leu Gln Leu Val Gly Val Thr Gly Thr Asn Gly Lys Thr 115 120 Thr Thr Gln Leu Met Ala Gln Trp Ala Gln Leu Leu Gly Glu Thr 135 140 Gly Ala Val Met Gly Thr Val Gly Asn Gly Leu Leu Gly Lys Val Ser 150 155 Pro Thr Glu Asn Thr Thr Gly Ser Ala Val Asp Val Gln Arg Val Leu 165 170 Ala Gly Leu Ala Glu Gln Gly Ala Thr Phe Ala Ala Met Glu Val Ser 180 185 Ser His Gly Leu Val Gln His Arg Val Ala Ala Leu Lys Phe Ala Ala 195 200 205 Ser Val Phe Thr Asn Leu Ser Arg Asp His Leu Asp Tyr His Gly Asp 215 220 Met Glu His Tyr Glu Ala Ala Lys Trp Leu Leu Tyr Ser Thr His His 230 235 His Gly Gln Ala Ile Ile Asn Ala Asp Asp Glu Val Gly Arg Arg Trp 250 Leu Glu Lys Leu Pro Asp Ala Val Ala Val Ser Met Glu Asp Arg Ile 265 Asn Pro Asn Cys Arg Gly Arg Trp Leu Lys Ala Val Glu Val Asn Tyr 280 285 His Asp Ser Gly Ala Thr Ile Arg Phe Ala Ser Ile Trp Gly Glu Gly 295 300 Glu Ile Glu Ser Arg Leu Met Gly Ala Phe Asn Val Ser Asn Leu Leu 310 315 Leu Ala Leu Ala Thr Leu Leu Ala Leu Gly Tyr Pro Met Ala Asp Leu 325 330

Leu Lys Thr Ala Glu Arg Leu Gln Pro Val Cys Gly Arg Met Glu Val 340 345 Phe Ser Ala Pro Gly Lys Pro Thr Val Val Val Asp Tyr Ala His Thr 360 Pro Asp Ala Leu Glu Lys Ala Leu Glu Ala Ala Arg Leu His Cys Ala 370 375 380 Gly Lys Leu Trp Cys Val Phe Gly Cys Gly Gly Asp Arg Asp Lys Gly 390 395 Lys Arg Pro Leu Met Gly Ala Ile Ala Glu Gln Phe Ala Asp Ile Pro 405 410 Val Val Thr Asp Asp Asn Pro Arg Thr Glu Glu Pro Arg Ala Ile Ile 420 425 Asn Asp Ile Leu Ala Gly Met Leu Asp Ala Gly Arg Ala Arg Val Val 440 Glu Gly Arg Ala Glu Ala Val Thr Asn Ala Ile Met Gln Ala Gln Glu 455 Asn Asp Val Val Leu Leu Ala Gly Lys Gly His Glu Asp Tyr Gln Ile 470 475 Val Gly Asn Arg Arg Leu Asp Tyr Ser Asp Arg Val Thr Ala Ala Arg 485 490 Leu Leu Gly Val Val Ala 500

<210> 9443

<211> 472

<212> PRT

<213> Enterobacter cloacae

<400> 9443

Thr Glu Arg Leu Ala Gly Ala Ala Arg His Cys Ala Leu Leu Asp Tyr 10 Phe Ala Asp Ala Gly Ala Asp Trp Pro Gly Asn Ala Glu Gly Thr Leu 25 Ile Met Ala Asp Tyr Gln Gly Lys Lys Val Val Ile Ile Gly Leu Gly 40 Leu Thr Gly Leu Ser Cys Val Asp Phe Phe Leu Ala Arg Gly Val Thr 55 Pro Arg Val Met Asp Thr Arg Val Ser Pro Pro Gly Leu Asp Lys Leu 70 75 Pro Glu Gln Val Glu Arg His Leu Gly Gly Leu Asn Asp Glu Trp Leu 85 90 Leu Thr Ala Asp Leu Ile Val Ala Ser Pro Gly Met Ala Leu Ala His 105 Pro Ser Leu Ser Ala Ala Ala Asp Ala Gly Val Glu Ile Val Gly Asp 120 Ile Glu Leu Phe Cys Arg Glu Ala Gln Ala Pro Ile Val Ala Ile Thr 135 Gly Ser Asn Gly Lys Ser Thr Val Thr Thr Leu Val Gly Glu Met Ala 150 155 Lys Ala Ala Gly Lys Asn Val Gly Val Gly Gly Asn Ile Gly Leu Pro 170 165 Ala Leu Met Leu Leu Asp Lys Gly Cys Glu Leu Phe Val Leu Glu Leu 180 185 Ser Ser Phe Gln Leu Glu Thr Thr Ser Ser Leu His Ala Ala Ala Ala 200 205 Thr Ile Leu Asn Val Thr Glu Asp His Met Asp Arg Tyr Pro Phe Gly 215 220 Leu Gln Gln Tyr Arg Ala Ala Lys Leu Arg Val Tyr Glu Asn Ala Lys 230 235 Val Cys Val Val Asn Ala Asp Asp Ala Leu Thr Met Pro Val Arg Gly 250 245

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Ala Asp Asp Arg Cys Ile Ser Phe Gly Ile Asn Met Gly Asp Tyr His
                                265
            260
Leu Asn Arg Gln Gln Gly Glu Thr Trp Leu Arg Val Lys Gly Glu Lys
        275
                            280
Val Leu Asn Val Lys Glu Met Met Leu Ser Gly Gln His Asn Tyr Thr
                       295
                                            300
Asn Ala Leu Ala Ala Leu Ala Leu Ala Asp Ala Val Gly Leu Pro Arg
                    310
                                        315
Ser Ser Ser Leu Lys Ala Leu Thr Thr Phe Thr Gly Leu Ala His Arg
                325
                                    330
Phe Gln Leu Ala Leu Glu His Asn Gly Val Arg Trp Ile Asn Asp Ser
                                345
Lys Ala Thr Asn Val Gly Ser Thr Glu Ala Ala Leu Asn Gly Leu His
                            360
Val Asp Gly Thr Leu His Leu Leu Leu Gly Gly Asp Gly Lys Ser Ala
                        375
Asp Phe Ser Ser Leu Lys Gln Tyr Leu Asn Gly Asp Asn Val Arg Leu
                    390
                                        395
Tyr Cys Phe Gly Arg Asp Gly Ser Glu Leu Ala Ala Leu Arg Pro Glu
               405
                                    410
Val Ala Glu Gln Thr Glu Thr Met Glu Gln Ala Met Arg Leu Ile Ala
                   .
                                425
           420
Pro Arg Val Lys Pro Gly Asp Met Val Leu Leu Ser Pro Ala Cys Ala
  435
                           440
Ser Leu Asp Gln Phe Lys Asn Phe Glu Gln Arg Gly Asp Val Phe Thr
                       455
Arg Leu Ala Lys Glu Leu Gly
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<210> 9444 <211> 493

<212> PRT

<213> Enterobacter cloacae

<400> 9444

Arg Met Asn Thr Gln Gln Leu Ala Lys Leu Arg Ser Ile Val Pro Glu Met Arg Arg Val Arg His Ile His Phe Val Gly Ile Gly Gly Ala Gly 25 Met Gly Gly Ile Ala Glu Val Leu Ala Asn Glu Gly Tyr Gln Ile Ser Gly Ser Asp Leu Ala Pro Asn Pro Val Thr Gln Gln Leu Ala Ser Leu Gly Ala Thr Ile Tyr Phe Asn His Arg Pro Glu Asn Val Ser Asp Ala Ser Val Val Val Val Ser Ser Ala Ile Ser Ala Asp Asn Pro Glu Ile Val Ala Ala His Glu Ala Arg Ile Pro Val Ile Arg Arg Ala Glu Met 105 Leu Ala Glu Leu Met Arg Phe Arg His Gly Ile Ala Val Ala Gly Thr 120 His Gly Lys Thr Thr Thr Ala Met Val Ser Ser Ile Tyr Ala Glu 140 135 Ala Gly Leu Asp Pro Thr Phe Val Asn Gly Gly Leu Val Lys Ala Ala 150 155 Gly Val His Ala Arg Leu Gly His Ser Arg Tyr Leu Ile Ala Glu Ala 165 170 Asp Glu Ser Asp Ala Ser Phe Leu His Leu Gln Pro Met Val Ala İle 180 185 Val Thr Asn Ile Glu Ala Asp His Met Asp Thr Tyr Gln Gly Asp Phe 200 205

```
Glu Asn Leu Lys Gln Thr Phe Ile Asn Phe Leu His Asn Leu Pro Phe
    210
                                            220
                        215
Tyr Gly Arg Ala Val Met Cys Val Asp Asp Pro Val Ile Arg Glu Leu
                    230
                                        235
Leu Pro Arg Val Gly Arg Gln Ile Thr Thr Tyr Gly Phe Ser Glu Asp
                245
                                    250
Ala Asp Val Arg Val Glu Asp Tyr Lys Gln Ile Gly Ala Gln Gly His
            260
                                265
Phe Thr Leu Ala Arg Gln Asp Lys Asp Leu Leu His Val Thr Leu Asn
                            280
Ala Pro Gly Arg His Asn Ala Leu Asn Ala Ala Ala Ala Val Ala Val
                        295
Ala Thr Glu Glu Gly Ile Asp Asp Glu Ala Ile Leu Arg Ala Leu Glu
                                        315
Ser Phe Gln Gly Thr Gly Arg Phe Asp Phe Leu Gly Glu Phe Pro
                325
                                    330
Leu Glu Pro Val Asn Gly Lys Pro Gly Ser Ala Met Leu Val Asp Asp
            340
                                345
Tyr Gly His His Pro Thr Glu Val Asp Ala Thr Ile Lys Ala Ala Arg
        355
                            360
Ala Gly Trp Pro Glu Lys Asn Leu Val Met Ile Phe Gln Pro His Arg
                        375
                                            380
Tyr Thr Arg Thr Arg Asp Leu Tyr Asp Asp Phe Ala Asn Val Leu Ser
                    390
                                        395
Gln Val Asp Thr Leu Leu Met Leu Asp Val Tyr Ala Ala Gly Glu Thr
               405
                                    410
Pro Ile Pro Gly Ala Asp Ser Arg Ser Leu Cys Arg Thr Ile Arg Gly
                                425
            420
Arg Gly Lys Val Asp Pro Ile Leu Val Pro Asp Pro Ala Gln Val Ala
       435
                            440
Glu Met Leu Ala Pro Val Leu Thr Gly Asn Asp Leu Ile Leu Ile Gln
                        455
                                            460
Gly Ala Gly Asn Ile Gly Lys Ile Ala Arg Thr Leu Ala Glu Ile Lys
                   470
                                        475
Leu Lys Pro Gln Thr Gln Glu Asp Glu Arg His Gly
               485
```

<210> 9445 <211> 341

<212> PRT

<213> Enterobacter cloacae

### <400> 9445

Thr Leu Leu Leu Leu Ile Arg Pro Cys Trp Arg Arg Asn Gln Gly 10 Glu Arg Leu Lys His Gly Gly Arg Lys Arg Gly Val Met Leu Phe Gly Ser Phe Arg Gly Pro Phe Leu Tyr Cys Phe Tyr Arg Tyr Gly Gln Leu Val Ser Phe Arg Thr Leu Gly Arg Thr Glu Ser Met Ala Glu Pro Gln Asn Asp Pro Leu Leu Pro Gly Tyr Ser Phe Asn Ala His Leu Val Ala 70 Gly Leu Thr Pro Ile Glu Ala Glu Gly Tyr Leu Asp Phe Tyr Val Asp 90 Arg Pro Leu Gly Met Lys Gly Tyr Ile Leu Asn Leu Thr Val Arg Gly 100 105 110 Glu Gly Val Val Lys Asn Gly Asp Gln Gln Phe Ile Cys Arg Pro Gly 120 Asp Met Leu Leu Phe Pro Pro Gly Glu Ile His His Tyr Gly Arg His 135

```
Pro Asp Ala Lys Glu Trp Tyr His Gln Trp Val Tyr Phe Arg Pro Arg
                    150
                                        155
Ala Tyr Trp Gln Glu Trp Leu Ser Trp Pro Ala Ile Phe Ala His Thr
                                    170
                165
Gly Leu Tyr Arg Pro Asp Glu Ala His Leu Ala Gln Phe Arg Glu Leu
            180
                                185
                                                    190
Phe Ala Gln Ile Ile Glu Ala Gly Gln Ala Gly Gly Arg Tyr Ala Glu
                            200
Leu Leu Ala Ile Asn Leu Leu Glu Gln Val Leu Leu Arg Arg Met Glu
                        215
Ala Ile Asn Glu Ser Leu Asn Pro Pro Leu Asp Asn Arg Val Arg Asp
                    230
                                        235
Ala Cys Gln Tyr Ile Ser Asp His Leu Ala Asp Ser Gln Phe Asp Ile
                245
                                    250
Ala Ser Val Ala Gln His Val Cys Leu Ser Pro Ser Arg Leu Ser His
                                265
Leu Phe Arg Gln Gln Leu Gly Val Ser Val Leu Ser Trp Arg Glu Asp
        275
                            280
                                                285
Gln Arg Ile Ser Gln Ala Lys Leu Leu Ser Thr Thr Arg Met Pro
                        295
                                            300
Ile Ala Thr Val Gly Arg Asn Val Gly Phe Glu Asp Gln Leu Tyr Phe
                    310
                                        315
Ser Arg Val Phe Lys Lys Cys Thr Gly Ala Ser Pro Ser Glu Phe Arg
                                    330
                325
Ala Gly Cys Glu
            340
```

<210> 9446 <211> 585

<212> PRT

<213> Enterobacter cloacae

<400> 9446

Pro Ser Ile Thr Lys Ala Trp Arg Gln Ser Met Glu Met Leu Ser Gly 10 Ala Glu Met Val Val Arg Ser Leu Ile Asp Gln Gly Val Lys Gln Val 25 Phe Gly Tyr Pro Gly Gly Ala Val Leu Asp Ile Tyr Asp Ala Leu His 40 Thr Val Gly Gly Ile Asp His Val Leu Val Arg His Glu Gln Ala Ala 55 Val His Met Ala Asp Gly Leu Ala Arg Ala Thr Gly Glu Val Gly Val 70 75 Val Leu Val Thr Ser Gly Pro Gly Ala Thr Asn Ala Ile Thr Gly Ile 90 Ala Thr Ala Tyr Met Asp Ser Ile Pro Leu Val Ile Leu Ser Gly Gln 105 Val Ala Thr Ser Leu Ile Gly Tyr Asp Ala Phe Gln Glu Cys Asp Met 120 Val Gly Ile Ser Arg Pro Val Val Lys His Ser Phe Leu Val Lys Gln 135 140 Thr Glu Asp Ile Pro Gly Val Leu Lys Lys Ala Phe Trp Leu Ala Ala 150 155 Ser Gly Arg Pro Gly Pro Val Val Val Asp Leu Pro Lys Asp Ile Leu 165 170 Asn Pro Ala Asn Lys Leu Pro Tyr Leu Trp Pro Glu Ser Val Ser Met 180 185 Arg Ser Tyr Asn Pro Thr Thr Gln Gly His Lys Gly Gln Ile Lys Arg 195 200 205 Ala Leu Gln Thr Leu Leu Ala Ala Lys Lys Pro Val Val Tyr Val Gly 215 220

```
Gly Gly Ala Val Asn Ala Ala Cys Glu Thr Gln Leu Arg Glu Leu Ile
                    230
                                        235
Glu Lys Leu Asn Leu Pro Val Ala Ser Ser Leu Met Gly Leu Gly Ala
                245
                                    250
Phe Pro Ala Thr His Arg Gln Ala Leu Gly Met Leu Gly Met His Gly
            260
                                265
Thr Tyr Glu Ala Asn Met Thr Met His His Ser Asp Val Ile Phe Ala
                            280
Val Gly Val Arg Phe Asp Asp Arg Thr Thr Asn Asn Leu Ala Lys Tyr
                        295
                                            300
Cys Pro His Ala Thr Val Leu His Ile Asp Ile Asp Pro Thr Ser Ile
                    310
                                        315
Ser Lys Thr Val Pro Ala Asp Val Pro Ile Val Gly Asp Ala Arg Gln
                325
                                    330
Val Leu Asp Gln Met Leu Asp Leu Leu Ala Gln Glu Thr Ala Ser Gln
                                345
Pro Leu Asp Glu Ile Arg Asp Trp Trp Gln Gln Ile Glu Gln Trp Arg
                            360
Gly Arg Gln Cys Leu Lys Tyr Asp Thr Gln Ser Glu Asn Ile Lys Pro
                    . 375
Gln Ala Val Ile Glu Thr Ile Trp Arg Leu Thr Asn Gly Asp Ala Tyr
                    390
                                        395
Val Thr Ser Asp Val Gly Gln His Gln Met Phe Ala Ala Leu Tyr Tyr
               405
                                    410
Pro Phe Asp Lys Pro Arg Arg Trp Ile Asn Ser Gly Gly Leu Gly Thr
           420
                                425
                                                    430
Met Gly Phe Gly Leu Pro Ala Ala Leu Gly Val Lys Leu Ala Leu Pro
       435
                            440
Asn Glu Thr Val Ile Cys Val Thr Gly Asp Gly Ser Ile Gln Met Asn
                        455
                                            460
Ile Gln Glu Leu Ser Thr Ala Leu Gln Tyr Glu Leu Pro Val Leu Val
                    470
                                        475
Leu Asn Leu Asn Asn Gly Tyr Leu Gly Met Val Lys Gln Trp Gln Asp
               485
                                    490
Met Ile Tyr Ser Gly Arg His Ser Gln Ser Tyr Met Lys Ser Leu Pro
                                505
Asp Phe Val Arg Leu Ala Glu Ala Tyr Gly His Ile Gly Met Arg Val
                            520
                                                525
Thr Asp Pro Ser Glu Leu Glu Ala Lys Leu Gly Glu Ala Leu Glu His
                       535
                                            540
Val Lys Asn Asn Arg Leu Val Phe Met Asp Val Ile Val Asp Gly Thr
                   550
                                       555
Glu His Val Tyr Pro Met His Ile Arg Gly Gly Met Asp Glu Met
                                    570
               565
Trp Leu Ser Lys Thr Glu Arg Thr
           580
```

<211> 338

<212> PRT

<213> Enterobacter cloacae

<400> 9447

```
Arg Ser Ile Gly Leu Val Ile Pro Asp Leu Glu Asn Thr Ser Tyr Thr
                                        75
Arg Ile Ala Asn Tyr Leu Glu Arg Gln Ala Arg Gln Arg Gly Tyr Gln
                                    90
                85
Leu Leu Ile Ala Cys Ser Glu Asp Gln Pro Asp Asn Glu Met Arg Cys
            100
                                105
Ile Glu His Leu Leu Gln Arg Gln Val Asp Ala Ile Ile Val Ser Thr
                            120
                                                125
Ser Leu Pro Pro Glu His Pro Phe Tyr Gln Arg Trp Ala Asn Asp Pro
                        135
                                            140
Phe Pro Ile Val Ala Leu Asp Arg Ala Leu Asp Arg Glu His Phe Thr
                                        155
Ser Val Val Gly Ala Asp Gln Asp Asp Ala Glu Met Leu Ala Ala Glu
                165
                                    170
Leu Arg Thr Phe Pro Ala Glu Thr Val Leu Tyr Leu Gly Ala Leu Pro
                                185
Glu Leu Ser Val Ser Phe Leu Arg Glu Gln Gly Phe Arg Thr Ala Trp
                            200
Lys Asp Asp Pro Arg Asp Val His Tyr Leu Tyr Ala Asn Ser Tyr Glu
                        215
                                            220
Arg Glu Ala Ala Gln Leu Phe Glu Lys Trp Leu Glu Thr His Pro
                                        235
                    230
Met Pro Gln Ala Leu Phe Thr Thr Ser Phe Ala Leu Leu Gln Gly Val
                245
                                    250
Met Asp Val Thr Leu Arg Arg Asp Gly Lys Leu Pro Ser Asp Leu Ala
           260
                               265
Ile Ala Thr Phe Gly Asp Asn Glu Leu Leu Asp Phe Leu Gln Cys Pro
                           280
Val Leu Ala Val Ala Gln Arg His Arg Asp Val Ala Glu Arg Val Leu
                                           300
                       295
Glu Ile Val Leu Ala Ser Leu Asp Glu Pro Arg Lys Pro Lys Pro Gly
                                       315
                   310
Leu Thr Arg Ile Lys Arg Asn Leu Tyr Arg Arg Gly Ile Leu Ser Arg
                                    330
His
```

<210> 9448 <211> 171 <212> PRT

<213> Enterobacter cloacae

<400> 9448

Thr Pro Ser Gly Gly Asn Leu Trp Val Lys Val Val Arg Arg Gly Glu Thr Gly Met Phe Arg Gly Ala Thr Leu Val Asn Leu Asp Ser Lys Gly Arg Leu Ser Val Pro Thr Arg Tyr Arg Asp Gln Leu Ile Glu Asn Ala 40 Ser Gly Gln Leu Val Cys Thr Ile Asp Ile Asn Ser Pro Cys Leu Leu 55 Leu Tyr Pro Leu Pro Glu Trp Glu Ile Ile Glu Gln Lys Leu Ser Arg 70 Leu Ser Ser Met Asn Pro Gln Glu Arg Arg Val Gln Arg Leu Leu 85 90 Gly His Ala Ser Glu Cys Gln Met Asp Ser Ala Gly Arg Leu Leu Ile 100 105 Ala Pro Val Leu Arg Gln His Ala Gly Leu Thr Lys Glu Val Met Leu 120 Val Gly Gln Phe Asn Lys Phe Glu Leu Trp Asp Glu Thr Thr Trp Tyr 135 140

Gln Gln Val Lys Glu Asp Ile Asp Ala Glu Gln Ser Asp Ser Glu Thr
145 150 155 160

Leu Ser Glu Arg Leu Arg Asp Leu Ser Leu
165 170

<210> 9449 <211> 376

<212> PRT

<213> Enterobacter cloacae

<400> 9449

Cys Arg His Gly Arg Gly Cys Ala Arg Ile Thr Gly Glu Arg Asp Met 10 Leu Val Trp Leu Ala Glu His Leu Val Lys Tyr Tyr Ser Gly Phe Asn 20 30 Val Phe Ser Tyr Leu Thr Phe Arg Ala Ile Val Ser Leu Leu Thr Ala 40 Leu Phe Ile Ser Leu Trp Met Gly Pro Arg Met Ile Ala Arg Leu Gln Lys Leu Ser Phe Gly Gln Val Val Arg Asn Asp Gly Pro Glu Ser His 70 75 Phe Ser Lys Arg Gly Thr Pro Thr Met Gly Gly Ile Met Ile Leu Thr 85 90 Ala Ile Val Val Ser Val Leu Leu Trp Ala Tyr Pro Ser Asn Pro Tyr 100 105 Val Trp Cys Val Leu Thr Val Leu Val Gly Tyr Gly Ile Ile Gly Phe 115 120 Val Asp Asp Tyr Arg Lys Val Val Arg Lys Asp Thr Lys Gly Leu Ile 135 Ala Arg Trp Lys Tyr Phe Trp Met Ser Val Ile Ala Leu Gly Val Ala 150 155 Phe Ala Leu Tyr Leu Ala Gly Lys Asp Thr Pro Ala Thr Glu Leu Val 165 170 Val Pro Phe Phe Lys Asp Val Met Pro Gln Leu Gly Leu Phe Tyr Ile 180 185 190 Leu Leu Ala Tyr Phe Val Ile Val Gly Thr Gly Asn Ala Val Asn Leu 200 205 Thr Asp Gly Leu Asp Gly Leu Ala Ile Met Pro Thr Val Phe Val Ala 215 220 Gly Gly Phe Ala Leu Val Ala Trp Ala Thr Gly Asn Met Asn Phe Ala 230 235 Asn Tyr Leu His Ile Pro Tyr Leu Arg His Ala Gly Glu Leu Val Ile 245 250 Val Cys Thr Ala Ile Val Gly Ala Gly Leu Gly Phe Leu Trp Phe Asn 265 270 260 Thr Tyr Pro Ala Gln Val Phe Met Gly Asp Val Gly Ser Leu Ala Leu 275 280 285 Gly Gly Ala Leu Gly Ile Ile Ala Val Leu Leu Arg Gln Glu Phe Leu 295 300 Leu Val Ile Met Gly Gly Val Phe Val Val Glu Thr Leu Ser Val Ile 310 315 Leu Gln Val Gly Ser Phe Lys Leu Arg Gly Gln Arg Ile Phe Arg Met 330 Ala Pro Ile His His His Tyr Glu Leu Lys Gly Trp Pro Glu Pro Arg 345 Val Ile Val Arg Phe Trp Ile Ile Ser Leu Met Leu Val Leu Ile Gly 360

370

Leu Ala Thr Leu Lys Val Arg

```
<213> Enterobacter cloacae
<400> 9450
Asn Ala Ser Gly Glu Ser Ser Gly Val Tyr Thr Arg Phe Thr Met Asn
                                    10
Gln Pro Lys Arg Leu Met Val Met Ala Gly Gly Thr Gly Gly His Val
            20
                                25
Phe Pro Gly Leu Ala Val Ala His His Leu Met Glu Gln Gly Trp Gln
                                                45
                            40
Val Arg Trp Leu Gly Thr Ala Asp Arg Met Glu Ala Asp Leu Val Pro
                        55
Lys His Gly Ile Glu Ile Asp Phe Ile Arg Ile Ser Gly Leu Arg Gly
                    70
                                        75
Lys Gly Ile Lys Ala Leu Leu Ala Pro Val Arg Ile Phe Asn Ala
                                    90
Trp Arg Gln Ala Arg Ala Ile Met Lys Arg Phe Lys Pro Asp Val Val
            100
                                105
Leu Gly Met Gly Gly Tyr Val Ser Gly Pro Gly Gly Leu Ala Ala Trp
       115
                            120
Ser Leu Gly Ile Pro Val Val Leu His Glu Gln Asn Gly Ile Ala Gly
                        135
Leu Thr Asn Lys Trp Leu Ala Lys Ile Ala Thr Lys Val Met Gln Ala
                    150
                                        155
Phe Pro Gly Ala Phe Pro Lys Ala Asp Val Val Gly Asn Pro Val Arg
                                    170
                165
Val Asp Val Leu Ala Leu Ala Leu Pro Asp Thr Arg Leu Ala Gly Arg
            180
                                185
Glu Gly Pro Val Arg Val Leu Val Val Gly Gly Ser Gln Gly Ala Arg
                            200
       195
Ile Leu Asn Gln Thr Met Pro Gln Val Ala Ala Lys Leu Gly Asp Ala
                        215
                                            220
Val Thr Ile Trp His Gln Ser Gly Lys Gly Ala Gln Gln Thr Val Glu
                    230
                                        235
Gln Ala Tyr Ala Gln Glu Gly Gln Pro Gln His Lys Val Thr Glu Phe
                245
                                    250
Ile Asp Asp Met Ala Ala Ala Tyr Ala Trp Ala Asp Val Val Cys
            260
                                265
Arg Ser Gly Ala Leu Thr Val Ser Glu Ile Ala Ala Gly Leu Pro
       275
                            280
                                                285
Ala Leu Phe Val Pro Phe Gln His Lys Asp Arg Gln Gln Tyr Trp Asn
                       295
                                            300
Ala Leu Pro Leu Glu Lys Ala Gly Ala Ala Lys Ile Phe Glu Gln Pro
                    310
                                        315
Gln Phe Thr Ala Asp Ala Val Ala Thr Thr Leu Ala Gly Trp Asn Arg
               325
                                    330
Asp Val Leu Leu Glu Met Ala Gln Arg Ala Arg Ala Thr Ala Ile Pro
                                345
Asp Ala Thr Glu Arg Val Ala Lys Glu Val Ser Leu Ala Ala Gln Ala
                            360
```

```
<210> 9451
```

<211> 369 <212> PRT

<sup>&</sup>lt;211> 316

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
10
Leu Phe Gly Gly Thr Ser Ala Glu Arg Glu Val Ser Leu Asn Ser Gly
                                25
Ala Ala Val Leu Ala Gly Leu Arg Glu Gly Gly Val Asp Ala His Pro
Val Asp Pro Lys Glu Val Asp Val Thr Gln Leu Lys Ala Met Gly Phe
                        55
Asp Lys Ala Phe Ile Ala Leu His Gly Arg Gly Glu Asp Gly Thr
                                        75
                    70
Leu Gln Gly Leu Leu Glu Leu Ile Gly Ile Pro Tyr Thr Gly Ser Gly
                85
                                    90
Val Met Ala Ser Ala Ile Ser Met Asp Lys Leu Arg Ser Lys Leu Leu
                                105
                                                    110
Trp Gln Gly Ala Gly Leu Pro Val Ala Pro Trp Val Ala Leu Thr Arg
                            120
Arg Glu Tyr Glu Leu Gly Leu Ser Asp Ser Val Asn Thr Arg Ile Ala
                        135
Ala Leu Gly Leu Pro Val Ile Val Lys Pro Ser Arg Glu Gly Ser Ser
                                        155
                    150
Val Gly Met Ser Lys Val Asp Lys Ala Val Asp Leu Ala Asp Ala Leu
                                    170
Ala Leu Ala Phe Gln His Asp Glu Glu Val Leu Ile Glu Lys Trp Leu
Ser Gly Pro Glu Phe Thr Val Ala Met Leu Gly Glu Glu Ile Leu Pro
        195
                            200
Ser Ile Arg Ile Gln Pro Ala Gly Val Phe Tyr Asp Tyr Glu Ala Lys
                        215
Tyr Leu Ser Asp Glu Thr Gln Tyr Phe Cys Pro Ala Gly Leu Glu Ala
                    230
                                        235
Glu Arg Glu Ala Glu Leu Gln Ser Leu Val Leu Lys Ala Trp Asn Val
                245
                                    250
Leu Gly Cys Arg Gly Trp Gly Arg Ile Asp Val Met Leu Asp Gly Asp
                                265
            260
Gly Gln Phe Tyr Leu Leu Glu Ala Asn Thr Ser Pro Gly Met Thr Ser
                            280
                                                285
His Ser Leu Val Pro Met Ala Ala Arg Gln Ala Gly Met Ser Phe Ser
                        295
Gln Leu Val Val Arg Ile Leu Asp Gln Ala Gly
                    310
```

<211> 155

<212> PRT

<213> Enterobacter cloacae

#### <400> 9452

 Phe
 Ile
 Asp
 Thr
 Pro
 Pro
 Ala
 Gly
 Ala
 Ile
 Leu
 Ala
 Ala
 Lys
 Leu
 Leu
 Leu
 Ile
 Leu
 Ala
 Ala
 Ser
 Gly
 Ile
 Ala
 Phe
 Ala
 Phe
 Ala
 Phe
 Ala
 Phe
 Ala
 Phe
 Ala
 Ala
 Phe
 Ala
 Ala</th

120 Thr Lys Pro Glu Asn Gln Glu Arg Arg Arg Gln Glu Asn Asp Gln 135 Ala Ile Arg Asp Asn Arg Val Thr Gln His 150 <210> 9453 <211> 243 <212> PRT <213> Enterobacter cloacae <400> 9453 Pro Ser Asp Arg Leu Val Lys Thr Ile Val Gln Ala Thr Gly Val Gly 10 Leu His Thr Gly Lys Lys Val Thr Leu Thr Leu Arg Pro Ala Pro Ala Asn Thr Gly Val Ile Tyr Arg Arg Thr Asp Leu Asn Pro Pro Val Asp Phe Pro Ala Asp Ala Lys Ser Val Arg Asp Thr Met Leu Cys Thr Cys Leu Val Asn Glu His Asp Val Arg Ile Ser Thr Val Glu His Leu Asn Ala Ala Leu Ala Gly Leu Gly Ile Asp Asn Ile Met Val Glu Val Asp 90 Ala Pro Glu Ile Pro Ile Met Asp Gly Ser Ala Ala Pro Phe Val Tyr 105 Leu Leu Asp Ala Gly Ile Glu Glu Leu Asn Cys Ala Lys Lys Phe 120 Val Arg Ile Lys Glu Thr Val Arg Val Glu Asp Gly Asp Lys Trp Ala 135 140 Glu Phe Lys Pro Tyr Asn Gly Phe Ser Leu Asp Phe Thr Ile Asp Phe 150 155 Asn His Pro Ala Ile Asp Ser Ser Thr Gln Arg Tyr Ala Met Asn Phe 165 170 Ser Ala Asp Ala Phe Met Arg Gln Ile Ser Arg Ala Arg Thr Phe Gly 180 185 Phe Met Arg Asp Ile Glu Tyr Leu Gln Ser Arg Gly Leu Cys Leu Gly 195 200 Gly Ser Phe Asp Cys Ala Ile Val Val Asp Asp Tyr Arg Val Leu Asn 215 220 Glu Asp Gly Leu Arg Phe Glu Asn Glu Phe Val Arg His Lys Met Leu 230 235 Asp Ala Ile. <210> 9454 <211> 282 <212> PRT <213> Enterobacter cloacae <400> 9454 His Glu Val Ala Leu Ile Tyr Pro Gly Asp Pro Met Ala Ile Lys Leu 10 Ile Ala Ile Asp Met Asp Gly Thr Leu Leu Pro Asp His Thr Ile Ser Pro Ala Val Lys Asn Ala Ile Ala Ala Ala Arg Glu Lys Gly Val Asn Val Val Leu Thr Thr Gly Arg Pro Tyr Ala Gly Val His Ser Tyr Leu Lys Glu Leu His Met Asn Gln Pro Gly Asp Tyr Cys Ile Thr Tyr

```
Asn Gly Ala Leu Val Gln Lys Ala Ala Asp Gly Ser Thr Val Ala Gln
                                     90
                85
Thr Ala Leu Ser Tyr Asp Asp Tyr Arg Phe Leu Glu Lys Leu Ser Arg
                                105
Asp Val Gly Ser His Phe His Ala Leu Asp Arg Asn Thr Leu Tyr Thr
                            120
Ala Asn Arg Asp Ile Ser Tyr Tyr Thr Val His Glu Ser Tyr Val Ala
                        135
                                            140
Thr Ile Pro Leu Val Phe Cys Glu Ala Glu Lys Met Asp Pro Ala Thr
                    150
                                        155
Gln Phe Leu Lys Val Met Met Ile Asp Glu Pro Ala Val Leu Asp Lys
                165
                                    170
Ala Ile Ser Arg Ile Pro Ala Glu Val Lys Glu Lys Tyr Thr Val Leu
            180
                                185
                                                     190
Lys Ser Ala Pro Tyr Phe Leu Glu Ile Leu Asp Lys Arg Val Asn Lys
                            200
                                                 205
Gly Thr Gly Val Lys Ser Leu Ala Asp Ala Leu Gly Ile Lys Pro Glu
                        215
                                            220
Glu Ile Met Ala Leu Gly Asp Gln Glu Asn Asp Ile Ala Met Ile Glu
                    230
                                        235
Tyr Ala Gly Met Gly Val Ala Met Asp Asn Ala Ile Pro Ser Val Lys
                245
                                    250
Glu Val Ala Asn Phe Val Thr Lys Ser Asn Leu Glu Asp Gly Val Ala
                                265
                                                     270
Trp Ala Ile Glu Lys Phe Val Leu Ser
        275
```

<211> 326

<212> PRT

<213> Enterobacter cloacae

<400> 9455 Ser Ala Val Arg Cys Asp Thr Ala Ser Gly Arg Arg Cys Gly Arg Ala Gly Gly Ala Asp His Asp Arg Gln Leu Asp Thr Lys Val Glu Gly Asn His Met Thr Ser Arg Tyr Ile Ala Ile Asp Trp Gly Ser Thr Asn Leu Arg Ala Trp Leu Tyr Gln Gly Glu Gln Cys Leu Glu Ser Arg Gln Ser Glu Ala Gly Val Thr Arg Leu Asn Gly Lys Ser Pro Ala Ala Val Leu 75 Ala Glu Val Thr Gln Asn Trp Arg Asp Gly Thr Thr Pro Val Val Met Ala Gly Met Val Gly Ser Asn Val Gly Trp Lys Val Ala Pro Tyr Leu 100 105 110 Ser Val Pro Val His Phe Thr Ala Val Gly Glu Gln Leu Thr Ser Val 120 125 Gly Asp Asn Val Trp Ile Ile Pro Gly Leu Cys Val Ser Arg Asp Asp 1.35 140 Asn His Asn Val Met Arg Gly Glu Glu Thr Gln Leu Leu Gly Ala Arg 155 150 Thr Leu Ser Pro Ser Ser Val Tyr Val Met Pro Gly Thr His Cys Lys 165 170 Trp Val Gln Ala Asp Ala Glu Gln Ile His Asp Phe Arg Thr Val Met 185 Thr Gly Glu Leu His His Leu Leu Lys His Ser Leu Val Gly Thr 200 Gly Leu Pro Glu Gln Thr Pro Ser Pro Glu Ala Phe Ala Ala Gly Leu 215

Glu Arg Gly Ile Ala Ser Pro Ala Val Leu Pro Gln Leu Phe Glu Val 230 235 Arg Ala Ser His Val Leu Gly Asn Leu Pro Arg Glu Gln Val Ser Glu 245 250 Phe Leu Ser Gly Leu Leu Ile Gly Ala Glu Val Ala Thr Leu Ser Asp 260 265 Ala Phe Ala Gly Gln Gln Ala Ile Thr Leu Val Ala Gly Ser Ser Leu 280 285 Thr Ser Arg Tyr Arg Gln Ala Phe His Ala Ile Gly Arg Asp Val Ala 295 300 Ala Val Glu Gly Asp Thr Ala Phe Gln Ala Gly Ile Arg Ser Ile Ala 310 315 His Ala Val Ala Asn 325

<210> 9456

<211> 112

<212> PRT

<213> Enterobacter cloacae

<400> 9456

<210> 9457

<211> 401

<212> PRT

<213> Enterobacter cloacae

<400> 9457

Ala Tyr Arg Thr. Ala Gly Gly Ser Ile Cys Glu Ser Val Ser Arg Gly Ser Ala Met Lys Ile Thr Lys Leu Thr Thr Tyr Arg Leu Pro Pro Arg 20 25 Trp Met Phe Leu Lys Ile Glu Thr Asp Glu Gly Val Val Gly Trp Gly 40 Glu Pro Val Ile Glu Gly Arg Ala Arg Thr Val Glu Ala Ala Val His 55 60 Glu Leu Gly Glu Tyr Leu Ile Gly Gln Asp Pro Ala Arg Ile Asn Asp 70 75 Leu Trp Gln Val Met Tyr Arg Ala Gly Phe Tyr Arg Gly Gly Pro Ile 85 90 Leu Met Ser Ala Ile Ala Gly Ile Asp Gln Ala Leu Trp Asp Ile Lys 100 105 110 Gly Lys Val Leu Asn Ala Pro Val Trp Gln Leu Met Gly Gly Leu Val . 120 125 Arg Asp Lys Ile Lys Ala Tyr Ser Trp Val Gly Asp Arg Pro Ala 135 140 Glu Val Ile Asp Gly Ile Arg Gln Leu Arg Asn Ile Gly Phe Asp Thr

## 5068

```
150
                                       155
Phe Lys Leu Asn Gly Cys Glu Glu Met Gly Val Ile Asp Asn Ser Arg
                165
                                    170
Ala Val Asp Arg Ala Val Asn Thr Val Ala Gln Ile Arg Glu Ala Phe
                                185
Gly Asn Glu Ile Glu Phe Gly Leu Asp Phe His Gly Arg Val Ser Ala
                            200
Pro Met Ala Lys Val Leu Ile Lys Glu Leu Glu Pro Tyr Arg Pro Leu
                        215
                                            220
Phe Ile Glu Glu Pro Val Leu Ala Glu Gln Ala Glu Tyr Tyr Pro Lys
                    230
                                        235
Leu Ala Glu Gln Thr His Ile Pro Ile Ala Ala Gly Glu Arg Met Phe
                245
                                    250
Ser Arg Phe Glu Phe Lys Arg Val Leu Glu Ala Gly Gly Ile Ala Ile
            260
                                265
Leu Gln Pro Asp Leu Ser His Ala Gly Gly Ile Thr Glu Cys Tyr Lys
                            280
                                                 285
Ile Ala Gly Met Ala Glu Ala Tyr Asp Val Ala Leu Ala Pro His Cys
                        295
                                            300
Pro Leu Gly Pro Ile Ala Leu Ala Ala Cys Leu His Val Asp Phe Val
                    310
                                        315
Ser Arg Asn Ala Val Phe Gln Glu Gln Ser Met Gly Ile His Tyr Asn
                                    330
Lys Gly Ala Glu Leu Leu Asp Phe Val Lys Asn Lys Glu Asp Phe Ser
Met Glu Gly Gly Phe Phe Lys Pro Leu Thr Lys Pro Gly Leu Gly Val
                            360
Glu Ile Asp Glu Ala Lys Val Ile Glu Leu Ser Lys Ser Ala Pro Asp
                        375
Trp Arg Asn Pro Leu Trp Arg His Glu Asp Gly Ser Val Ala Glu Trp
                    390
```

<210> 9458

<211> 466

<212> PRT

<213> Enterobacter cloacae

<400> 9458

Arg Ile Pro Phe Thr Phe Leu Ile Lys Lys Thr Lys Tyr Thr Leu Cys 10 Lys Leu Gln Gly Met Val Ser Gly Phe Ala Met Pro Lys Ile Trp Arg 20 25 Gln Ile Ala Met Asp Ile Pro Val Thr Ala Ala Lys Thr Gly Arg Arg 40 Arg Tyr Leu Thr Leu Ile Met Ile Phe Ile Thr Val Val Ile Cys Tyr 55 60 Val Asp Arg Ala Asn Leu Ala Val Ala Ser Ala His Ile Gln Glu Glu 70 75 Phe Gly Ile Thr Lys Ala Glu Met Gly Tyr Val Phe Ser Ala Phe Ala 90 8.5 Trp Leu Tyr Thr Leu Cys Gln Ile Pro Gly Gly Trp Phe Leu Asp Arg 105 Val Gly Ser Arg Leu Thr Tyr Phe Ile Ala Ile Phe Gly Trp Ser Val 120 Ala Thr Leu Phe Gln Gly Phe Ala Thr Gly Leu Met Ser Leu Ile Gly 135 Leu Arg Ala Ile Thr Gly Val Phe Glu Ala Pro Ala Phe Pro Thr Asn 155 Asn Arg Met Val Thr Ser Trp Phe Pro Glu His Glu Arg Ala Ser Ala

```
170
Val Gly Phe Tyr Thr Ser Gly Gln Phe Val Gly Leu Ala Phe Leu Thr
                                185
Pro Leu Leu Ile Trp Ile Gln Glu Leu Leu Ser Trp His Trp Val Phe
                            200
Ile Val Thr Gly Gly Ile Gly Ile Ile Trp Ser Leu Ile Trp Phe Lys
                        215
                                            220
Val Tyr Gln Pro Pro Arg Leu Thr Lys Ser Ile Thr Lys Ala Glu Leu
                    230
                                        235
Asp Tyr Ile Arg Asp Gly Gly Gly Leu Val Asp Gly Asp Ala Pro Val
                245
                                    250
Lys Lys Glu Ala Arg Gln Pro Leu Thr Arg Ala Asp Trp Lys Leu Val
                                265
            260
Phe His Arg Lys Leu Val Gly Val Tyr Leu Gly Gln Phe Ala Val Thr
        275
                            280
Ser Thr Leu Trp Phe Phe Leu Thr Trp Phe Pro Asn Tyr Leu Thr Gln
                        295
                                            300
Glu Lys Gly Ile Thr Ala Leu Lys Ala Gly Phe Met Thr Thr Val Pro
Phe Leu Ala Ala Phe Phe Gly Val Leu Leu Ser Gly Trp Leu Ala Asp
                                    330
Lys Leu Val Lys Lys Gly Phe Ser Leu Gly Val Ala Arg Lys Thr Pro
Ile Ile Cys Gly Leu Leu Ile Ser Thr Cys Ile Met Gly Ala Asn Tyr
                            360
Thr Asn Asp Pro Val Trp Ile Met Thr Leu Met Ala Val Ala Phe Phe
                        375
Gly Asn Gly Phe Ala Ser Ile Thr Trp Ser Leu Val Ser Ser Leu Ala
                    390
                                        395
Pro Met Arg Leu Ile Gly Leu Thr Gly Gly Val Phe Asn Phe Val Gly
                                    410
Gly Leu Gly Gly Ile Thr Val Pro Leu Val Ile Gly Tyr Leu Ala Gln
                                425
            420
Asp Tyr Gly Phe Gly Pro Ala Leu Val Tyr Ile Ser Ala Val Ala Leu
       435
                            440
                                                445
Ile Gly Ala Leu Ser Tyr Ile Leu Leu Val Gly Asp Val Lys Arg Val
                        455
Gly
465
<210> 9459
<211> 427
<212> PRT
<213> Enterobacter cloacae
<400> 9459
Ser Leu Arg Met Phe Tyr Pro Asp Ala Ile Thr Ala His Gln Gly Ile
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Phe Met Lys Gln Ile Thr Phe Ala Ser Arg Asn His Gln Leu Thr Asn
                                25
Ile Asn Thr Trp Thr Pro Asp Ser Gln Trp Leu Val Tyr Asp Val Arg
                            40
Pro Ser Gly Ala Ser Phe Thr Gly Glu Thr Ile Glu Arg Val Asn Val
Ser Thr Gly Glu Val Glu Ala Ile Tyr Arg Ala Thr Asp Gly Ala His
Val Gly Val Val Thr Val His Pro Ala Gln Asp Lys Tyr Val Phe Ile
His Gly Pro Lys Asn Pro Asp Ala Asp Trp Gln Tyr Asp Phe His His
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100 105 110 Arg Gln Gly Val Ile Ala His Asn Gly Gln Val Ser Asn Leu Asp Ala

		115					120					125			
Met	Asp 130	Ile	Thr	Ala	Pro	Tyr 135	Thr	Ala	Gly	Ala	Leu 140	Arg	Gly	Gly	Thr
His 145	Val	His	Val	Phe	Ser 150	Pro	Asn	Gly	Gln	Phe 155	Val	Ser	Phe	Thr	Tyr 160
	Asp	His	Val	Leu 165	His	Ala	Arg	Asp	Pro 170	Gln	Leu	Asp	Leu	Arg 175	Asn
Val	Gly	Val	Ala 180		Pro	Phe	Gly	Pro 185	Val	Asn	Pro	Gln	Gly 190	Asn	His
Pro	Arg	Glu 195	Tyr	Ala	Gly	Thr	Phe 200	Trp	Ser	Val	Leu	Val 205	Ser	Arg	Thr
Thr	Pro 210	Asn	Pro	Lys	Pro	Gly 215	Ser	Asp	Glu	Val	Asn 220	Arg	Ala	Tyr	Glu
Glu 225	Gly	Trp	Val	Gly	Asn 230	Asp	Arg	Leu	Ala	Phe 235		Gly	Asp	Thr	Val 240
Ser	Ala	Lys	Gly	Glu 245	Lys	Val	Pro	Glu	Leu 250	Phe	Ile	Val	Asp	Leu 255	Pro
Lys	Asp	Glu	Gln 260	Gly	Trp	Lys	Arg	Ala 265	Gly	Asp	Ala	Pro	Leu 270	Gln	Gly
Thr	Pro	Asp 275	Thr	Met	Pro	Ala	Pro 280	Pro	Ala	Gly	Val	Met 285	Gln	Arg	Arg
Leu	Thr 290	Phe	Thr	His	Gln	Lys 295	Ala	Tyr	Pro	Gly	Leu 300	Val	Asn	Val	Pro
Arg 305	His	Trp	Val	Arg	Ser 310	Asn	Pro	Gln	Gly	Thr 315	Glņ	Val	Ala	Phe	Leu 320
Met	Arg	Asp	Asp	Asn 325	Gly	Val	Val	Gln	Leu 330	Trp	Leu	Ile	Ser	Pro 335	Glu
Gly	Gly	Glu	Pro 340	Arg	Gln	Leu	Thr	His 345	Ser	Glu	Ser	Asp	Ile 350	Gln	Ser
Ala	Phe	Asn 355	Trp	His	Pro	Ser	Gly 360	Arg	Thr	Leu	Gly	Phe 365	Val	Leu	Glu
Ser	Arg 370	Ile	Ala	Cys	Суѕ	Asp 375	Ala	Gln	Thr	Gly	Glu 380	Val	Thr	Phe	Leu
Thr 385	Ser	Asp	His	Gly	Asn 390	Pro	Pro	Ser	Ala	Asp 395	Ala	Val	Val	Phe	Ser 400
Pro	Asp	Gly	Arg	Phe 405	Ile	Ala	Trp	Met	Glu 410	Ala	Lys	Asp	Gly	Phe 415	Arg
Gln	Leu	Trp	Leu 420	Thr	Glu	Thr	Ala	Gln 425	Asn						

<211> 155

<212> PRT

<213> Enterobacter cloacae

# <400> 9460

Thr Val Pro Asn Ser Leu Leu Arg Arg Phe Ser Met Arg Asn Tyr 10 Asp Phe Ser Pro Leu Leu Arg Gln Trp Ile Gly Phe Asp Lys Leu Ala 20 25 30 Asn Ala Leu Gln Ser Ala Thr Glu Gln Gln Thr Phe Pro Pro Tyr Asn 40 Ile Glu Lys Ser Asp Asp Asn His Tyr Arg Ile Thr Leu Ala Leu Ala 55 .60 Gly Phe Arg Gln Glu Asp Leu Asp Ile Gln Leu Glu Gly Ala Arg Leu Thr Val Lys Gly Ser Pro Glu Lys Pro Asp Thr Glu Thr Lys Trp Leu 90 His Gln Gly Leu Val Thr Gln Pro Phe Ser Leu Ser Phe Thr Leu Ala 105 Asp His Met Glu Val Ser Gly Ala Thr Phe Thr Asn Gly Leu Leu Asn

120 Ile Asp Leu Thr Arg Asn Val Pro Glu Ala Ile Ala Pro Gln Arg Ile 135 Ala Ile Ser Glu Arg Pro Ala Leu Asn Ser 150 <210> 9461 <211> 617 <212> PRT <213> Enterobacter cloacae <400> 9461 Ser Cys Ala Gly Trp Cys Pro His Pro Asp Pro Leu Pro Val Gly Glu Gly Ala Asn Thr Lys Asn Gly His Leu Arg Val Thr Val Leu Arg Leu Pro Ser Ala Phe Leu Cys Ala Ile Ala His Thr Thr Ala Ala Ser Ser Glu Arg Ile Leu Ile Ile Thr Lys Val Ile His Arg Met Trp Asn Met Ser Asp Ile Ala Leu Thr Val Ser Val Leu Ala Leu Val Ala Val Val Gly Leu Trp Leu Gly Asn Ile Lys Ile Arg Gly Val Gly Phe Gly Ile 85 Gly Gly Val Leu Phe Gly Gly Ile Phe Val Gly His Phe Ala Asp Gln 100 105 Leu Gly Trp Val Leu Ser Ala Asp Met Leu His Phe Ile Gln Glu Phe 115 120 Gly Leu Ile Leu Phe Val Tyr Thr Ile Gly Ile Gln Val Gly Pro Gly 135 140 Phe Phe Ala Ser Leu Arg Ile Ser Gly Leu Arg Leu Asn Leu Phe Ala 155 150 Phe Gly Ile Val Val Met Gly Gly Leu Val Thr Ala Ile Leu His Lys 170 165 Leu Phe Ala Ile Pro Leu Pro Val Val Leu Gly Ile Phe Ser Gly Ala 180 185 Val Thr Asn Thr Pro Ala Leu Gly Ala Gly Gln Gln Ile Leu Arg Asp 200 Leu Gly Ile Pro Ala Asp Val Val Asp Gln Met Gly Met Ser Tyr Ala 215 220 Met Ala Tyr Pro Phe Gly Ile Cys Gly Ile Leu Leu Ser Met Trp Leu 230 235 Val Arg Val Leu Phe Arg Val Asn Val Gly Gln Glu Ala Lys Glu His 245 250 Glu Ser Thr Leu Thr Asn Gly His Ala Leu Ile Lys Thr Ile Asn Ile 265 260 Arg Val Glu Asn Pro Asn Leu Asn Asn Met Ala Ile Gln Asp Val Pro 280 285 Ile Leu Asn Ser Ala Thr Ile Ile Cys Ser Arg Leu Lys Arg Asp Asp 295 300 Thr Leu Met Val Pro Ser Pro Asp Thr Leu Ile Gln His Gly Asp Leu 315 Leu His Leu Val Gly Gln Pro Ala Asp Leu Asn Asn Ala Arg Leu Val 325 330 Ile Gly Gln Glu Val Asp Thr Ser Leu Ser Thr Arg Gly Thr Asp Met 345 Arg Val Glu Arg Val Val Thr Asn Glu Lys Val Leu Gly Lys Lys 360 Ile Arg Asp Leu Gln Val Lys Glu Arg Tyr Asp Val Val İle Ser Arg 375

Leu Asn Arg Ala Gly Val Glu Leu Val Ala Ser Gln Asp Ala Ser Leu

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390
                                       395
Gln Phe Gly Asp Ile Leu Asn Leu Val Gly Arg Pro Ser Ser Ile Asp
               405
                                    410
Ala Val Ala Asp Met Val Gly Asn Ala Gln Gln Lys Leu Gln Gln Val
            420
                                425
Gln Met Leu Pro Val Phe Ile Gly Val Gly Leu Gly Val Met Leu Gly
                            440
        435
Ser Ile Pro Leu Tyr Val Pro Gly Phe Pro Val Ala Leu Lys Leu Gly
                        455
                                            460
Leu Ala Gly Gly Pro Leu Ile Met Ala Leu Ile Leu Gly Arg Ile Gly
                    470
                                        475
Ser Ile Gly Lys Leu Tyr Trp Phe Met Pro Pro Ser Ala Asn Leu Ala
                                    490
Leu Arg Glu Leu Gly Ile Val Leu Phe Leu Ala Val Val Gly Leu Lys
                                505
Ser Gly Gly Asp Phe Val Asp Thr Leu Val Asn Gly Glu Gly Met Ser
        515
                            520
Trp Val Gly Tyr Gly Ile Phe Ile Thr Ala Ile Pro Leu Ile Thr Val
                        535
                                            540
Gly Leu Leu Ala Arg Met Phe Ala Lys Met Asn Tyr Leu Thr Leu Cys
                    550
                                        555
545
Gly Met Leu Ala Gly Ser Met Thr Asp Pro Pro Ala Leu Ala Phe Ala
                565
                                    570
Asn Asn Leu His Ala Thr Ser Gly Ala Ala Leu Ser Tyr Ala Thr
                                585
                                                    590
Val Tyr Pro Leu Val Met Phe Leu Arg Ile Ile Thr Pro Gln Leu Leu
                            600
Ala Val Leu Phe Trp Gly Met Gly
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<211> 558
<212> PRT
<213> Enterobacter cloacae
<400> 9462
Lys Thr Ile Lys Ala Ser Ile Pro Tyr Arg Leu Phe His Glu Asp Leu
                                    10
Lys Met Leu Ser Gln Ile Gln Arg Phe Gly Gly Ala Met Phe Thr Pro
          20
                                25
Val Leu Leu Phe Pro Phe Ala Gly Ile Val Gly Ile Ala Ile Met
                            40
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Leu Arg Asn Pro Leu Phe Val Gly Glu Ala Leu Thr Ala Pro Asp Asn 55 Leu Phe Ala Gln Ile Val His Ile Ile Glu Glu Gly Trp Ala Val 70 75 Phe Arg Asn Met Pro Leu Ile Phe Ala Val Gly Leu Pro Ile Gly Leu 90 Ala Lys Gln Ala Gln Gly Arg Ala Cys Leu Ala Val Leu Ile Ser Phe 105 Leu Thr Trp Asn Tyr Phe Ile Asn Ala Met Gly Met Thr Trp Gly His 120 Phe Phe Gly Val Asp Phe Ser Ala Glu Pro Thr Ala Gly Ser Gly Leu 135 140 Ala Met Ile Ala Gly Ile Lys Thr Leu Asp Thr Ser Ile Ile Gly Ala 150 155 Ile Ile Ile Ser Gly Leu Val Thr Ala Ile His Asn Arg Phe Phe Asp 165 170 Lys Pro Leu Pro Val Phe Leu Gly Ile Phe Gln Gly Thr Ser Phe Val 185 180 Val Ile Leu Ala Phe Phe Val Met Ile Pro Cys Ala Trp Leu Thr Leu

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200
                                                 205
Leu Gly Trp Pro Lys Val Gln Met Gly Ile Glu Ser Leu Gln Ala Phe
                        215
Leu Arg Thr Ala Gly Ala Leu Gly Val Trp Val Tyr Thr Phe Leu Glu
                    230
                                        235
Arg Ile Leu Ile Pro Thr Gly Leu His His Phe Val Tyr Gly Pro Phe
                                    250
                245
Ile Phe Gly Pro Ala Ala Val Glu Gly Gly Ile Gln Val Tyr Trp Ala
                                265
            260
Gln His Leu Gln Glu Phe Ser Gln Ser Thr Val Pro Leu Lys Thr Leu
                            280
                                                 285
        275
Phe Pro Glu Gly Gly Phe Ala Leu His Gly Asn Ser Lys Val Phe Gly
                     . 295
                                             300
    290
Ser Val Gly Ile Ala Leu Ala Ile Trp Tyr Thr Ala Ser Pro Glu Asn
                    310
                                         315
Arg Val Lys Val Ala Gly Leu Leu Ile Pro Ala Thr Leu Thr Ala Val
                                     330
Leu Val Gly Ile Thr Glu Pro Leu Glu Phe Thr Phe Leu Phe Ile Ser
                                345
Pro Leu Leu Phe Ala Ile His Ala Val Leu Ala Ala Thr Met Ala Thr
                            360
Val Met Tyr Ile Phe Gly Val Val Gly Asn Met Gly Gly Gly Leu Leu
                        375
Asp Gln Phe Leu Pro Gln Asn Trp Ile Pro Met Phe His Asn His Ala
                    390
                                         395
Ser Thr Val Phe Thr Gln Ile Gly Ile Gly Leu Cys Phe Thr Gly Ile
                405
                                    410
Tyr Phe Val Val Phe Arg Thr Leu Ile Glu Arg Leu Asn Leu Lys Thr
            420
                                425
Pro Gly Arg Glu Glu Ser Glu Ile Lys Leu Tyr Ser Lys Ala Asp Tyr
        435
                            440
                                                 445
Lys Ala Ala Arg Gly Gln Thr Thr Ala Pro Ala Ala Ala Ser Gln Gln
                        455
Val Gly Gln Ala Ala Gly Phe Leu Gln Ala Leu Gly Gly Ala Ala Asn
                    470
                                         475
Ile Glu Ser Ile Asn Asn Cys Ala Thr Arg Leu Arg Ile Ala Leu Val
                                    490
                485
Asp Met Thr Lys Thr Gln Ser Asp Asp Val Phe Lys Ala Leu Gly Ala
                                505
            500
His Gly Val Val Arg Arg Gly Asn Gly Ile Gln Val Ile Val Gly Leu
                            520
His Val Pro Gln Val Arg Asp Gln Leu Glu Ser Leu Met Lys Thr Pro
                        535
Leu Thr Asn Glu Gln Thr Thr Leu Thr Glu Ala Ile Ser
                    550
<210> 9463
<211> 237
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<212> PRT

<213> Enterobacter cloacae

<400> 9463

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His Tyr Arg Arg Gly Thr His His Arg Tyr Arg Cys Arg Thr His Gly
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                                    90
Gly Val Gln His Gln Cys His Gln Pro Gly Glu Lys Asp Arg Val His
            100
                                105
Met Gln Val Arg Glu Asn Met Arg Gln Arg Leu Arg Gln Thr Thr Gly
                            120
                                                125
Phe Lys Asp Gly Val Glu Arg Pro Ala Arg Thr Asp Asn Gln Gln Asn
    130
                        135
                                            140
Val Gly Asp Arg Ala Lys Ala Val Leu Arg Met Gly Gln His Cys Ala
                    150
                                        155
His Ala His Val Leu Ala Asp Pro Gln Gln Val Ile Gly Asp Lys His
                165
                                    170
Gly Asp Lys His Arg Gly Asp Gly Val Ala Asp Lys Leu Gln Gln Gly
            180
                                185
Ile Gln Arg Ala Phe Phe Arg His Val Gln Leu Gly Asn Gly Phe His
                            200
Gln His Gln Gly Asn Arg Gln Gln His Gly Glu Gln Arg Gly Ala Gln
                        215
Arg Arg Gln Ser Val Leu Phe Pro His Leu Gln Val
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                                    10
Arg Asn Arg Leu Leu Asn Gly Trp Gln Leu Ser Lys Met Tyr Thr Phe
                                25
Glu Val Ala Ala Arg His Glu Ser Phe Ala Leu Ala Ala Ala Glu Leu
                            40
Ser Leu Ser Pro Ser Ala Val Ser His Arg Ile Asn Leu Leu Glu Glu
                        55
Glu Leu Gly Ile Gln Leu Phe Val Arg Ser His Arg Lys Val Glu Leu
                    70
                                        75
Thr Gln Glu Gly Lys Arg Val Tyr Trp Thr Leu Lys Ser Ser Leu Asp
               85
                                    90
Thr Leu Asn Gln Glu Ile Leu Asp Ile Lys Asn Gln Ala Leu Ser Gly
           100
                                105
Thr Leu Thr Val Tyr Ser Arg Pro Ser Ile Ala Gln Cys Trp Leu Val
                            120
                                                125
Pro Met Leu Gly Asp Phe Thr Arg Arg Tyr Pro Ser Ile Ser Leu Thr
                        135
                                            140
Ile Leu Thr Gly Asn Asp Tyr Val Asn Met Gln Arg Thr Gly Ile Asp
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Leu Ala Leu Tyr Phe Asp Asp Thr Pro Pro Asn His Leu Ser His His 165 170 175 Phe Leu Met Asp Glu Glu Ile Leu Pro Val Cys Ser Pro Ala Tyr Ala 180 185 190

155

150

Arg Glu His Glu Leu Leu Lys Asn Pro His Asn Leu Ser His Cys Thr 195 200 205 Leu Leu His Asp Arg Gln Ala Trp Ser Asn Asp Ser Gly Thr Asp Glu

210 215 220
Trp Leu Ser Trp Ala Gln His Phe Ala Val Asn Met Pro Leu Ser Ser 225 230 235 240

Gly Ile Gly Phe Asp Arg Ser Asp Leu Ala Ile Ile Ala Ala Met Ser 245 250 255 Asn Val Gly Val Ala Met Gly Arg Lys Arg Leu Val Gln Lys Arg Leu

260 265 Glu Arg Gly Glu Leu Ile Ala Pro Phe Asp Gly Glu Thr Leu Lys Cys 280 275 His Gln His Tyr Tyr Val Ser Thr Leu Pro Gly Arg Gln Trp Pro Lys 295 Ile Asp Ala Phe Ile Gly Trp Leu Arg Glu Leu Ala Gly 310 <210> 9465 <211> 372 <212> PRT <213> Enterobacter cloacae <400> 9465 Thr Val Leu Lys Pro Phe Ile Ala Thr Ala Ile Leu Leu Ser Ser Gly Trp Ala Thr Ala Ala Glu Pro Pro Leu Thr Ala Ala Arg Tyr Ala Gln Met Leu Gly Val Gly Met Asp Val Asp Trp Ala Arg Thr Glu Arg Gly 40 Ile Arg Glu Phe Asp Pro Leu Val Val Arg Asp Phe Gln Ala Lys Gly 55 Ile His His Val Arg Ile Arg Val Ala Gly Glu Pro Thr Glu Ala Arg 75 Leu Ile His Leu Arg Lys Leu Val Glu Ala Cys Glu Gln Tyr Gly Val 85 Ile Pro Ile Ile Ala Tyr Gln Ala Asp Glu Tyr Lys Asn Asp Pro Lys 100 105 Ala Asp Thr Glu Lys Glu Val Ile Asn Trp Trp Ile Ala Val Ala His 115 120 Tyr Phe Gly Gln Arg Ser Pro Leu Leu Gly Phe Asp Leu Ile Tyr Glu 135 140 Pro Ala Asp Lys Leu Asn His Asn Val Ala Ser Leu Asn Arg Val Tyr 150 155 Glu Lys Ala Ile Lys Asp Ile His Ala Ile Asp Ala Ser Arg Met Ile 165 170 Phe Ile Ala Pro Arg Leu Arg Ala Ala Pro Glu Asp Leu Ser Thr Leu 180 185 Lys Leu Pro Ala His Ser Gln Asn Tyr Leu Leu Ala Glu Trp His Ile 200 205 Phe Pro Trp Gly Pro Leu Lys Thr Asn Gly Lys Tyr Pro Trp Thr Ser 220 215 Gly Thr Ala Ala Glu Lys Ala Ala Ile Arg Asn Arg Ile Asn Ala Ala 230 235 Leu His Trp Gln Gln Lys Thr Gly His Val Ser Trp Val Gly Gly Trp 245 250 Gly Val Gly Glu Ser Lys Ser Leu Thr Pro Thr Ala Ser Gln Met Ala 265 270 Phe Ala Thr Phe Met Ala Cys Glu Leu Gln His Ala Asn Ile Pro Tyr 280 Ala Ile Asn Ala Asp Val Gln Phe Tyr Asp Gly Glu Glu Gly Ala Trp 295 Arg Pro Ala Pro Glu Arg Leu Leu Gln Ala Met Ile Ala Pro Val Cys 310 315 Glu Lys Pro Gly Glu Lys Pro Gly His His Ala Val Lys Pro Ala Val 325 330 Arg Asp Ala Arg His Ala Thr Pro Ala Ala Ser Thr Ala Lys Ser 345 340 Ala Ala Pro Ser Gly Ser Ser Ala Ser Leu Asn Ser Pro Ala Arg Ser

360

355

Ala Ala Ser

370

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<210> 9466
<211> 154
<212> PRT
<213> Enterobacter cloacae
<400> 9466
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Gly Glu Arg Met Val Trp Ile Met Leu Ala Thr Leu Ala Val Val Phe Val Val Gly Phe Arg Val Leu Thr Ser Asp Ser Arg Arg Ala Ile Lys 25 Arg Leu Ser Glu Arg Leu Gly Ile Thr Pro Met Pro Val Glu Ser Met Ile Asp Gln Phe Gly Lys Thr Pro Gly Asn Glu Phe Ile Arg Tyr Leu Glu Arg Pro Asp Glu Ala His Leu Gln Asn Ala Ala Gln Val Leu Leu Ile Trp Gln Val Cys Ile Val Asp Gly Ser Glu Glu Asn Leu His Thr 85 90 Trp His Arg Met Leu Arg Lys Ala Arg Leu Ala Ala Pro Ile Thr Asp 100 105 Ala Gln Ile Arg Leu Ala Leu Gly Phe Met Arg Glu Ile Glu Pro Asp 120 Pro Gln Glu Leu Asp Ala Phe Gln Leu Arg Tyr Asn Gln Leu Phe Leu 135 Pro Glu Glu Gly Val Phe Tyr Leu His 150

<210> 9467 <211> 411 <212> PRT <213> Enterobacter cloacae

<400> 9467

Thr Ala Arg Leu Phe Arg Thr Phe Leu Ser Ser Gly Asp Ala Met Thr 10 Glu His Ile Gln Pro Thr Thr Arg Pro Gln Thr Lys Glu Val Ser Arg 25 Pro Asn Trp Ser Ala Val Phe Ser Val Ala Phe Cys Val Ala Cys Leu 40 Ile Thr Val Glu Phe Leu Pro Val Ser Leu Leu Thr Pro Met Ala Gln 55 Asp Leu Gly Ile Ser Glu Gly Val Ala Gly Gln Ser Val Thr Val Thr 70 75 Ala Phe Val Ala Met Phe Ala Ser Leu Phe Ile Thr Gln Ala Ile Gly 90 Thr Ile Asp Arg Arg Lys Val Val Ile Leu Phe Ser Val Leu Leu Thr 105 Leu Ser Cys Leu Leu Val Ser Phe Ala Glu Ser Phe Thr Leu Leu Leu 120 Leu Gly Arg Ala Cys Leu Gly Leu Gly Leu Gly Gly Phe Trp Ala Met 140 135 Ser Ala Ser Leu Thr Met Arg Leu Val Pro Ala Arg Thr Val Pro Lys 155 150 Ala Leu Ser Val Ile Phe Gly Ala Val Ser Ile Ala Leu Val Ile Ala 165 170 Ala Pro Leu Gly Ser Phe Leu Gly Gly Ile Ile Gly Trp Arg Asn Val 180 185 190 Phe Asn Ala Ala Val Met Gly Val Leu Cys Ile Ile Trp Val Trp 200

Lys Ala Leu Pro Ser Leu Pro Gly Glu Ala Ala His His Lys Gln Asn 215 220 Met Phe Ala Leu Leu Lys Arg Pro Gly Val Leu Ala Gly Met Thr Ala 230 235 Ile Phe Met Ala Phe Ala Gly Gln Phe Ala Phe Phe Thr Tyr Ile Arg 250 245 Pro Val Tyr Met Thr Met Ala Gly Phe Asp Val Asp Gly Leu Thr Leu 265 260 Val Leu Leu Ser Phe Gly Ile Ala Ser Phe Val Gly Thr Ser Leu Ser 275 280 Ser Gln Phe Leu Lys Arg Ser Leu Lys Val Ala Leu Ala Gly Ala Pro 290 295 300 Leu Val Leu Ala Ile Ser Ala Ala Val Leu Val Leu Trp Gly Ser Asp 310 315 Lys Trp Val Ala Ser Ala Ile Ala Ile Ile Trp Gly Phe Ala Phe Ala 325 330 Leu Val Pro Val Gly Trp Ser Thr Trp Ile Thr Arg Ser Leu Ala Asp 345 Gln Ala Glu Lys Ala Gly Ser Ile Gln Val Ala Val Ile Gln Leu Ala 360 Asn Thr Cys Gly Ala Ala Val Gly Gly Val Ala Leu Asp His Leu Gly 375 Leu Thr Ser Pro Leu Val Ile Ser Gly Thr Leu Met Leu Leu Thr Ala 390 Leu Leu Val Ala Gly Lys Val Lys Ala Lys 405

<210> 9468

<211> 375

<212> PRT

<213> Enterobacter cloacae

<400> 9468

Arg Cys Arg Ile Thr Val Gly Cys Leu Cys Cys Tyr Ala Asn Glu Thr 10 Val Met Ser Leu Thr Arg Leu Leu Ile Arg Asp Phe Arg Asn Ile Glu 25 Ser Ala Asp Leu Ala Leu Ser Pro Gly Phe Asn Phe Leu Val Gly Ala 40 Asn Gly Ser Gly Lys Thr Ser Val Leu Glu Ala Ile Tyr Thr Leu Gly 55 His Gly Arg Ala Phe Arg Ser Leu Gln Ile Gly Arg Val Ile Arg His 70 75 Glu Gln Asp Ser Phe Val Leu His Gly Arg Leu Gln Gly Glu Glu Arg 85 90 Glu Thr Ala Ile Gly Leu Thr Lys Asp Lys Gln Gly Asp Ser Lys Val 100 105 Arg Ile Asp Gly Thr Asp Gly His Lys Val Ala Glu Leu Ala Leu Leu 120 125 Met Pro Met Gln Leu Ile Thr Pro Glu Gly Phe Thr Leu Leu Asn Gly 140 135 Gly Pro Lys Tyr Arg Arg Ala Phe Leu Asp Trp Gly Cys Phe His Asn 150 155 Glu Ala Gly Phe Phe Asn Ala Trp Ser Asn Leu Lys Arg Leu Leu Lys 170 165 Gln Arg Asn Ala Ala Leu Arg Gln Val Thr Arg Tyr Ala Gln Leu Arg 185 180 Pro Trp Asp Met Glu Leu Ile Pro Leu Ala Glu Gln Ile Ser Arg Trp 200 205 Arg Ala Glu Tyr Ser Ala Gly Ile Ala Glu Asp Met Ala Asp Thr Cys 215

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Lys Gln Phe Leu Pro Glu Phe Ser Leu Thr Phe Ser Phe Gln Arg Gly
                    230
                                        235
Trp Glu Lys Glu Thr Asp Tyr Ala Glu Val Leu Glu Arg Ser Phe Glu
                245
                                    250
Arg Asp Arg Met Leu Thr Tyr Thr Ala His Gly Pro His Lys Ala Asp
            260
                                265
                                                     270
Phe Arg Ile Arg Ala Asp Gly Ala Pro Val Glu Asp Thr Leu Ser Arg
                            280
Gly Gln Leu Lys Leu Leu Met Cys Ala Leu Arg Leu Ala Gln Gly Glu
                        295
                                             300
Phe Leu Thr Arg Glu Ser Gly Arg Arg Cys Leu Tyr Leu Ile Asp Asp
                    310
                                        315
Phe Ala Ser Glu Leu Asp Asp Ala Arg Arg Gly Leu Leu Ala Ser Arg
                325
                                     330
Leu Lys Ala Thr Gln Ser Gln Val Phe Val Ser Ala Ile Ser Ala Glu
            340
                                345
His Val Met Asp Met Ser Asp Glu Asn Ser Lys Met Phe Thr Val Glu
                            360
Lys Gly Lys Ile Thr Asp
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<212> PRT
<213> Enterobacter cloacae
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Gln Glu Lys Lys Met Thr Ala Thr Met Gln Arg Trp Ser Met Asp Ala
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Leu Gly Arg Glu Ser Leu Arg Leu Val Gln Glu Pro Val Pro Gln Pro
                                25
Gly Ser Gly Glu Val Arg Val Arg Val Asn Ala Val Ala Leu Asn Tyr
                            40
Arg Asp Lys Met Val Ile Glu Gly Thr Met Pro Ile Pro Leu Ser Phe
                        55
Pro Phe Thr Pro Ala Ser Asp Met Ala Gly Val Val Asp Ser Ile Gly
                    70
                                        75
Glu Gly Val Thr Arg Phe Lys Pro Gly Ala Arg Val Ile Ser Thr Phe
                                    90
Phe Pro Glu Trp Ile Asp Gly Lys Pro Gln Ala Asp Ala Arg Asp Leu
                                105
                                                     110
            100
Pro Tyr Lys Thr Ser Gly Gly Tyr Phe Gln Gly Met Leu Ala Glu Tyr
                                                125
                            120
        115
Val Ile Val Ser Glu Asn Ala Leu Val Ala Ser Pro Glu Ser Leu Asp
                        135
                                            140
Asp Ala Glu Ala Ser Thr Leu Pro Cys Ala Gly Leu Thr Ala Trp Phe
                    150
                                        155
Ala Leu Val Glu Arg Gly His Leu Arg Ala Gly Gln Ser Val Leu Val
                165
                                    170
Gln Gly Thr Gly Gly Val Ala Leu Phe Ala Leu Gln Ile Ala Lys Ala
                                185
His Gly Ala Glu Val Phe Val Ser Ser Gly Ser Asp Glu Lys Leu Ala
                            200
Arg Ala Lys Lys Leu Gly Ala Ser Gln Gly Ile Asn Arg Leu Lys Gly
Asp Trp Ala Glu Asn Thr Leu Ala Leu Thr Gln Asp Arg Gly Ile Asp
                    230
                                        235
His Ile Ile Glu Thr Val Gly Glu Asn Leu Arg His Ser Leu Arg
                                    250
Ala Val Ala Val His Gly Arg Ile Ser Val Ile Gly Val Leu Ala Gly
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Thr Glu Ile Ser Leu Pro Ala Ser Glu Leu Leu Leu Lys Ser Pro Val 275

Ile Gln Gly Ile Gly Val Gly His Arg Arg Ala Leu Glu Asp Phe Val 290

Arg Ala Val Asp Val Thr Glu Leu Lys Pro Val Ile Glu His Arg Tyr 305

Arg Phe Asp Glu Leu Glu Gln Ala Leu Glu His Leu Asp Arg Gly Ala 325

Phe Gly Lys Ile Val Leu Thr Arg Glu 345

<210> 9470 <211> 239 <212> PRT

<213> Enterobacter cloacae

<400> 9470 Trp Thr Tyr Arg Ala Gln Gly Leu Ser Met Thr Leu Asn Lys Thr Asp Arg Ile Val Ile Thr Leu Gly Thr Gln Ile Val Gly Gly Lys Tyr Val Pro Gly Ser Pro Leu Pro Ala Glu Ala Glu Leu Cys Glu Glu Phe Glu Thr Ser Arg Asn Ile Ile Arg Glu Val Phe Arg Ser Leu Met Ala Lys Arg Leu Ile Glu Met Lys Arg Tyr Arg Gly Ala Phe Val Ala Pro Arg 75 Asn Gln Trp Asn Tyr Leu Asp Thr Asp Val Leu Gln Trp Val Leu Glu 8.5 Asn Asp Tyr Asp Pro Arg Leu Ile Gly Ala Met Ser Glu Val Arg Asn 100 105 Leu Val Glu Pro Ala Ile Ala Arg Trp Ala Ala Glu Arg Ala Thr Ser 120 125 Gly Asp Leu Ala Gln Ile Glu Ser Ala Leu Asn Asp Met Ile Ala Asn 135 140 Asn Gln Asn Arg Glu Ala Phe Asn Glu Ala Asp Ile Arg Tyr His Glu 150 155 Ala Val Leu Gln Ser Val His Asn Pro Val Leu Gln Gln Leu Ser Val 170 165 Ala Ile Ser Ser Leu Gln Arg Ala Val Phe Glu Arg Thr Trp Met Gly 180 185 190 Asp Glu Ala Asn Met Pro Lys Thr Leu Gln Glu His Lys Ala Leu Phe 200 205 Asp Ala Ile Arg His Gln Asp Gly Asp Ala Ala Glu Gln Ala Ala Leu 215 220 Thr Met Ile Ala Ser Ser Thr Arg Arg Leu Lys Glu Ile Thr 230

<210> 9471 <211> 210

<212> PRT

<213> Enterobacter cloacae

<400> 9471

Gly Ala Ser Leu Met Gln Trp Gln Thr Glu Leu Pro Leu Ile Ala Ile

1 5 10 15

Leu Arg Gly Ile Thr Pro Gly Glu Ala Leu Ala His Val Gly Ala Val
20 25 30

Ile Asp Ala Gly Phe Asp Ala Val Glu Ile Pro Leu Asn Ser Pro Glu
35 40 45

Trp Glu Lys Ser Ile Pro Ala Ile Val Lys Ala Phe Gly Asp Lys Ala

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Leu Ile Gly Ala Gly Thr Val Leu Gln Pro Glu Gln Val Asp Glu Leu
                                        75
Ala Lys Met Gly Cys Lys Leu Ile Val Thr Pro Asn Met Asn Pro Glu
                85
                                    90
Val Ile Arg Arg Ala Val Glu Tyr Gly Met Thr Val Cys Pro Gly Cys
                                105
            100
Ala Thr Ala Thr Glu Ala Phe Ala Ala Leu Asp Ala Gly Ala Gln Ser
                            120
Leu Lys Ile Phe Pro Ser Ser Ala Phe Gly Pro Asp Tyr Ile Lys Ala
                        135
                                            140
Leu Lys Ala Val Leu Pro Ala Ser Val Pro Val Phe Ala Val Gly Gly
                    150
                                        155
Val Thr Pro Glu Asn Leu Val Gln Trp Ile Lys Ala Gly Cys Val Gly
                                    170
Ala Gly Leu Gly Ser Asp Leu Tyr Arg Ala Gly Gln Pro Val Glu Arg
                                185
Thr Ala Gln Gln Ala Ala Phe Val Lys Ala Tyr Arg Glu Ala Val
                            200
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<210> 9472
<211> 126
<212> PRT
<213> Enterobacter cloacae
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Ser Leu His Ala Ala Arg Gln Gly Thr Phe Met Asn Ile Ser Arg Leu
                                    10
Gly Glu Ala Pro Asp Tyr Arg Phe Ser Leu Ala Asn Glu Arg Thr Phe
                                25
Leu Ala Trp Ile Arg Thr Ala Leu Gly Phe Leu Ala Ala Gly Val Gly
                            40
Leu Asp Gln Leu Ala Pro Asp Phe Ala Thr Pro Leu Ile Arg Glu Val
                        55
Leu Ala Leu Leu Cys Leu Ile Ala Gly Val Leu Ala Ile Tyr Gly
                    70
                                        75
Tyr Leu Arg Trp Leu Arg Asn Glu Lys Ala Met Arg Leu Lys Gln Asp
                85
                                    90
Leu Pro Tyr Thr Arg Gly Leu Leu Ile Ile Ser Thr Ile Leu Leu Met
                                105
Val Ala Gly Val Val Met Leu Leu Val Leu Tyr Ala Gly
       115
                            120
<210> 9473
<211> 153
<212> PRT
<213> Enterobacter cloacae
<400> 9473
Thr Ile Thr Val Pro Thr Ser Ala Pro Asn Leu Leu Val Thr Asn Ser
Ala Ala Gly Cys Gly Gly Thr Thr Gln Cys Thr Ala Ile Ser Ala Val
                                25
Gln Ser Gly Met Ala Ser Leu Ser Ser Asp Val Leu Val Phe Leu Ala
                            40
Met Glu Asn Ala Ser Gly Ile Ser Ser Thr Thr Pro Thr Ser Thr Asn
                        55
Ser Val Met Pro Gln Ile Arg Pro Thr Arg Thr Ile Ile Thr Ser Ala
                                        75
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5081 Asp Ser Gln Arg Gln Arg Cys Asn Val Ile Pro Met Arg Ser Ala Ala 90 Pro Glu Thr Ser Ile Ile Leu Pro Arg Ile Val Pro Arg Pro Ile Thr 105 Ala Ala Arg Lys Pro Ser Val Pro Pro Ile Pro Leu Ser Met Ala Leu 120 125 Thr Ile Ser Ser Gly Leu Ile Pro Ile Ile Ala Pro Thr Lys Lys Leu 135 Ala Ser Ser Ser Ala Arg Asn Gly 150 <210> 9474 <211> 143 <212> PRT <213> Enterobacter cloacae <400> 9474 Gly Glu Glu Met Met Ile Val Ala Asp Ala Met Lys Ala Thr His Ala Leu Val Ala Ala Val Pro Leu Leu Gly Glu Gln Pro Ser Glu Lys Asp Tyr Lys Asp Ala Leu Glu Leu Val Glu Tyr Leu Leu Met Asn Glu Pro Asn Ser Pro Leu Leu Asp Ile Val Cys Ala Arg Ile Ser Arg Tyr Glu 55 Ala Asn Arg Pro Glu Ile Val Ala Leu Arg Lys Glu Met Glu Ser Val 75 Pro Val Gly Ile Ala Val Leu Arg Thr Leu Met Asp Gln Tyr Asn Leu Thr Ile Ser Asp Phe Lys Asp Glu Ile Gly Ser Lys Ser Met Val Ser 100 105 Arg Val Leu Asn Gly Gln Arg Gln Leu Thr Leu Asn His Ile Lys Lys 120 Leu Ala Ala Arg Phe Gly Val Ser Pro Ala Leu Phe Ile Glu <210> 9475 <211> 577 <212> PRT <213> Enterobacter cloacae <400> 9475 Thr Thr Thr Arg Lys Ala Gly Ser Glu Glu Lys Asp Trp Ser Met Ala 10

Ser Ser Gly Thr Thr Ser Thr Lys Thr Arg Phe Thr Gly Ala Gln Leu 20 25 Ile Val His Leu Leu Glu Arg Gln Gly Ile Thr Thr Val Ala Gly Ile 40 Pro Gly Gly Thr Val Leu Pro Leu Tyr Asp Ala Leu Ser Gln Ser Thr Gln Ile Arg His Val Leu Ala Arg His Glu Gln Gly Ala Gly Phe Ile Ala Gln Gly Met Ala Arg Thr Gln Gly Lys Pro Ala Val Cys Met Ala 90 Cys Ser Gly Pro Gly Ala Thr Asn Leu Val Thr Ala Ile Ala Asp Ala 105 Arg Leu Asp Ser Ile Pro Leu Ile Cys Ile Thr Gly Gln Val Pro Ser 120 125 Ser Met Ile Gly Thr Asp Ala Phe Gln Glu Val Asp Thr Tyr Gly Ile 135 Ser Ile Pro Ile Thr Lys His Asn Tyr Leu Val Arg Asp Ile Ser Glu

145					150					155					160
Leu	Pro	Gln	Val	Ile 165	Ser	Asp	Ala	Phe	Arg 170	Ile	Ala	Gln	Ser	Gly 175	Arg
Pro	Gly	Pro	Val 180	Trp	Ile	Asp	Ile	Pro 185	Lys	Asp	Val	Gln	Thr 190	Ala	Glu
Ile	Glu	Ile 195	Asp	Ile	Leu	Pro	Glu 200	Pro	Gly	Glu	Arg	Ala 205	Pro	Ala	Pro
Glu	Phe 210	Ser	Ala	Glu	Ser	Val 215	Arg	Asp	Ala	Ala	Ala 220	Met	Ile	Asn	Ala
Ala 225	Lys	Arg	Pro	Val	Leu 230	Tyr	Leu	Gly	Gly	Gly 235	Ala	Ile	Asn	Ala	Ala 240
_			_	245		Ala		_	250					255	
			260		_	Met		265					270		
•		275	_			Gly	280	_				285			
	290					Val 295					300				
305					310	Phe				315					320
_				325		Leu			330					335	
		_	340			Glu		345					350		
		355				Asp	360					365			
_	370			_		11e 375					380				
385	_				390	Val				395					400
				405		Gln			410					415	
			420		_	Gln		425					430		
	_	435				Ala	440					445			
_	450	_			_	Phe 455		_	_	_	460				
465					470	Ala				475					480
				485		Ala			490					495	
			500			Val		505			_		510		
		515				Ala	520		_			525	_	_	
	530					His 535					540				
545	_				550	His				555					560
Tyr	Pro	Met	Val	Pro 565	Pro	Gly	Ala	Ala	Asn 570	Thr	Glu	Met	Val	Gly 575	Glu

<sup>&</sup>lt;210> 9476 <211> 97

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

Ser Phe Phe Ile Phe Ser Ala Ala Trp Phe Cys Leu Trp Ser Ile Ser 25 Leu His Leu Val Glu Arg Pro Glu Leu Ala Val Leu Leu Phe Pro Phe Gly Leu Arg Leu Gly Leu Met Leu Gln Cys Pro Arg Gly Tyr Trp Pro 55 Val Leu Leu Gly Ala Glu Trp Leu Met Leu Ile Trp Leu Ala Gln Glu 75 Val Ala Leu Ala His Leu Pro Leu Leu Met Thr Gly Ser Leu Leu Thr 90 Leu Ile Pro Val Ala Leu Ile Ser Arg Tyr Arg His Gln Arg Asp Trp 100 105 Arg Thr Leu Leu Arg Gln Gly Ala Ala Leu Ile Ala Ala Ala Leu Leu 115 120 Gln Ser Leu Pro Trp Val Gly Glu Lys Glu Val Leu Asn Ala Leu Leu 135 140 Leu Thr Leu Thr Gly Gly Leu Thr Leu Ala Pro Thr Cys Leu Val Ile 150 155 Trp His Tyr Leu Thr Ser Thr Val Trp Gln Pro Leu Gly Pro Ala Leu 170 165 Val Ser Gln Pro Val Asn Trp Arg Ala Arg His Leu Ile Trp Tyr Leu 185 180 Leu Leu Phe Val Val Ser Leu Trp Leu Gln Leu Gly Leu Pro Ala Glu 200 205 Leu Ser Arg Phe Thr Pro Phe Cys Leu Ala Leu Pro Ile Ile Ala Leu 215 220 Ala Trp His Tyr Gly Trp Gln Gly Ala Leu Ile Ala Thr Leu Met Asn 230 235 Ala Ile Ala Leu Ile Ala Ser Gln Thr Trp His Asp His Pro Val Asp 245 250 Leu Leu Ser Leu Leu Ala Gln Ser Leu Thr Gly Leu Leu Gly 265 Ala Gly Ile Gln Arg Leu Arg Glu Leu Asn Gln Ser Leu Gln Asn Glu 280 Leu Ala Arg Asn Arg Arg Leu Ala Glu Arg Leu Leu Glu Thr Glu Glu 295

Ser Val Arg Gln Glu Val Ala Arg Glu Leu His Asp Asp Ile Gly Gln

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310
                                        315
Thr Ile Thr Ala Ile Arg Thr Gln Ala Gly Ile Val Gln Arg Leu Ala
                                    330
                325
Ala Glu Asn Ala Gly Val Lys Gln Gly Gly Ala His Ile Glu Gln Leu
            340
                                345
Ser Leu Gly Val Tyr Asp Ser Val Arg Arg Leu Leu Gly Arg Leu Arg
                            360
                                                 365
Pro Arg Gln Leu Asp Asp Leu Ser Leu Glu Gln Ala Val Arg Ser Leu
                        375
                                             380
Met Arg Glu Met Glu Leu Glu Ser Arg Gly Ile Val Ser His Leu Asp
                    390
                                         395
Trp Arg Ile Ser Glu Pro Ala Leu Ser Glu Gly Gln Arg Val Thr Leu
                                     410
Phe Arg Val Cys Gln Glu Gly Leu Asn Asn Ile Val Lys His Ala Ser
            420
                                425
Ala Ser Ala Val Thr Ile Gln Gly Trp Gln Gln Asp Glu Arg Leu Met
                            440
Leu Val Ile Glu Asp Asp Gly Cys Gly Leu Pro Pro Gly Ser Gly Gln
                        455
Gln Gly Phe Gly Leu Ala Gly Met Arg Glu Arg Val Lys Ala Leu Gly
                    470
                                         475
Gly Thr Leu Ser Leu Ser Cys Thr His Gly Thr Arg Val Ser Val Ser
                                    490
                485
Leu Pro Leu Arg Thr His His Val
            500
                                505
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<210> 9478

<211> 339

<212> PRT

<213> Enterobacter cloacae

<400> 9478

Arg Arg Ala Cys Met Leu Thr Arg Arg Leu Ser Cys Leu Ala Leu Leu 10 Met Ala Leu Ala Ser Pro Ala Met Ala Ala Asn Ala Pro Thr Tyr Gly 20 25 Glu Lys Leu Glu Gly Phe Asp Tyr Gly Trp Pro Val Lys His Phe Thr 40 45 Phe Thr Ser Gln Asn Gln Pro Leu Asp Met Ala Tyr Leu Asp Val Lys Pro Glu Lys Pro Asn Gly Arg Thr Val Val Leu Met His Gly Lys Asn 70 75 Phe Cys Ala Gly Thr Trp Asp Gly Thr Ile Arg Ala Leu Ser Ala Ser 90 Gly Tyr Arg Val Ile Ala Pro Asp Gln Ile Gly Phe Cys Lys Ser Thr 105 Lys Pro Glu His Tyr Gln Tyr Thr Phe Gln Gln Leu Ala Asp Asn Thr 120 His Ala Leu Leu Lys Thr Leu Gly Val Asp Arg Val Thr Val Ile Gly 135 140 His Ser Thr Gly Gly Met Leu Ala Thr Arg Tyr Ala Leu Met Trp Pro 155 150 Gln Gln Val Glu Gln Leu Val Met Val Asn Pro Ile Gly Leu Glu Asp 170 165 Trp Lys Ala Arg Gly Val Pro His Ile Thr Val Asp Gln Trp Tyr Gln 180 185 Arg Glu Leu Lys Val Ser Ala Asp Gly Ile Arg Gln Tyr Glu Lys Asn 200 Thr Tyr Tyr Ala Gly Glu Trp Lys Pro Glu Tyr Glu Arg Trp Val Thr 215 220 Met Leu Ala Gly Leu Asn Asn Gly Pro Gly Lys Glu Arg Val Ala Trp

230 235 Asn Ser Ala Leu Leu Tyr Asp Met Ile Tyr Thr Gln Pro Val Ile Tyr 250 245 Glu Phe Ser Glu Leu Ser Met Pro Val Leu Leu Met Ile Gly Thr Lys 260 265 270 Asp Asn Thr Ala Ile Gly Lys Asp Leu Ala Pro Pro Glu Ile Arg Lys 280 285 Thr Leu Gly Asn Tyr Ala Val Leu Gly Lys Glu Thr Ala Lys Arg Ile 295 300 Pro His Ala Thr Leu Val Glu Phe Asn Asp Met Gly His Ala Pro Gln 310 315 Met Gln Asp Pro Glu Arq Phe His Glu Ala Leu Leu Lys Gly Leu Gln 325 330 Ala Arg

<210> 9479

<211> 177

<212> PRT

<213> Enterobacter cloacae

<400> 9479

Thr Met Lys Gln Ser Ala Ile Ile Trp Pro Asn Asp Tyr Leu Pro Gly 10 Thr Thr Asp Asn Phe Ala Ser Asn Glu Ile Ile Val Ala Gly Leu Ser 25 20 Ala Lys Glu Ile Trp Ala Gln Leu Asn Asp Thr Thr Leu Trp Pro Asn 40 Tyr Tyr Ser Asn Ala Glu Asp Ile Arg Phe His Asp Gly Ser Gly Pro 55 Glu Leu Ser Ala Asn Ala Arg Phe Arg Phe Thr Thr Phe Gly Phe Pro 70 75 Val Glu Ala Gln Val Thr Glu Tyr Val Pro Pro Val Asp Gly Glu Ala 85 90 Ala Arg Ile Ala Trp His Gly Trp Val Glu Gly Asp Ala Ser Ser Arg 105 110 100 Leu Asp Val Ile His Ala Trp Leu Phe Glu Asp Leu Pro Gly Asn Arg 120 125 Val Arg Ile Leu Thr Gln Glu Ser Gln Lys Gly Val Pro Ala Gln Glu 135 140 Leu Ala Arg Thr Val Pro Asn Pro Met Ile Asn Gly His Gln Glu Trp 150 155 Ile Val Gly Leu Ala Asn Ala Ala Met Gln Glu Lys Leu Ser Lys Arg

170

<210> 9480

<211> 370

<212> PRT

<213> Enterobacter cloacae

<400> 9480

 Pro
 Pro
 Arg
 Thr
 Tyr
 Glu
 Trp
 Leu
 Ala
 Gly
 Ala
 Val
 Gly
 Pro
 10
 15
 15

 Leu
 Gln
 Val
 Ser
 Gly
 Pro
 Leu
 Gly
 Gly
 Arg
 Pro
 Thr
 Leu
 Pro
 Ile

 Leu
 Gly
 Asn
 Leu
 Leu
 Leu
 Gly
 Ala
 Asp
 Gly
 Thr
 Leu
 Ser
 Leu
 Thr

 Gly
 Thr
 Asp
 Leu
 Glu
 Met
 Ile
 Ala
 Arg
 Val
 Thr
 Leu
 Thr
 Gln

 Gly
 Thr
 Asn
 Leu
 Glu
 Met
 Ile
 Ala
 Arg
 Val
 Thr
 Leu
 Thr
 Gln

 Gly
 Thr
 Asn
 Leu
 Glu
 Met
 Ile
 Ala
 Arg
 Val
 Thr
 Leu
 Thr
 Gln

 Gly
 Thr
 Asn
 Asn
 Leu
 Thr
 Leu
 Thr
 Leu
 Thr
 Leu
 Thr<

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Pro His Asp Ala Gly Ala Thr Thr Val Pro Ala Arg Lys Phe Phe Asp
Ile Cys Arg Gly Leu Pro Glu Gly Ala Glu Ile Ala Val Gln Leu Glu
                85
                                    90
Gly Asp Arg Met Leu Val Arg Ser Gly Arg Ser Arg Phe Ser Leu Ser
                                105
Thr Leu Pro Ala Ala Asp Phe Pro Asn Leu Asp Asp Trp Gln Ser Glu
                            120
                                                 125
Val Glu Phe Thr Leu Pro Gln Ala Thr Met Lys Arg Leu Ile Glu Ala
                        135
                                            140
Thr Gln Phe Ser Met Ala His Gln Asp Val Arg Tyr Tyr Leu Asn Gly
                    150
                                        155
Met Leu Phe Glu Thr Glu Gly Glu Glu Leu Arg Thr Val Ala Thr Asp
                                    170
Gly His Arg Leu Ala Val Cys Ser Met Pro Ile Gly Asp Ser Leu Pro
                                185
Asn His Ser Val Ile Val Pro Arg Lys Gly Val Ile Glu Leu Met Arg
        195
                            200
Met Leu Asp Gly Gly Asp Thr Pro Leu Arg Val Gln Ile Gly Ser Asn
                        215
Asn Ile Arg Ala His Val Gly Asp Phe Val Phe Thr Ser Lys Leu Val
                    230
                                        235
Asp Gly Arg Phe Pro Asp Tyr Arg Arg Val Leu Pro Lys Asn Pro Asp
                245
                                    250
Lys Thr Leu Glu Ala Gly Cys Asp Ile Leu Lys Gln Ala Phe Ala Arg
            260
                                265
Ala Ala Ile Leu Ser Asn Glu Lys Phe Arg Gly Val Arg Leu Tyr Val
                            280
Ser Glu Asn Gln Ile Lys Ile Thr Ala Asn Asn Pro Glu Gln Glu Glu
                        295
                                            300
Ala Glu Glu Ile Leu Asp Val Thr Tyr Ala Gly Ala Glu Met Glu Ile
                    310
                                        315
Gly Phe Asn Val Ser Tyr Val Leu Asp Val Leu Asn Ala Leu Lys Cys
                325
                                    330
Glu Asn Val Arg Ile Leu Leu Thr Asp Ser Val Ser Ser Val Gln Ile
            340
                                345
Glu Asp Ala Ala Ser Gln Ser Ala Ala Tyr Val Val Met Pro Met Arg
                            360
Leu
   370
<210> 9481
<211> 810
<212> PRT
<213> Enterobacter cloacae
<400> 9481
Asn Glu Arg Glu Thr Leu Met Ser Asn Ser Tyr Asp Ser Ser Ser Ile
Lys Val Leu Lys Gly Leu Asp Ala Val Arg Lys Arg Pro Gly Met Tyr
Ile Gly Asp Thr Asp Asp Gly Thr Gly Leu His His Met Val Phe Glu
Val Val Asp Asn Ala Ile Asp Glu Ala Leu Ala Gly His Cys Lys Asp
Ile Val Val Thr Ile His Ala Asp Asn Ser Val Ser Val Thr Asp Asp
                    70
Gly Arg Gly Ile Pro Thr Gly Ile His Pro Glu Glu Gly Val Ser Ala
                                    90
Ala Glu Val Ile Met Thr Val Leu His Ala Gly Gly Lys Phe Asp Asp
                                105
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Asn Ser Tyr Lys Val Ser Gly Gly Leu His Gly Val Gly Val Ser Val 120 Val Asn Ala Leu Ser Gln Lys Leu Glu Leu Val Ile Gln Arg Glu Gly 135 140 Lys Ile His Arg Gln Ile Tyr Gln His Gly Val Pro Glu Ala Pro Leu 150 155 Ala Val Thr Gly Asp Thr Glu Lys Thr Gly Thr Met Val Arg Phe Trp 165 170 Pro Ser Leu Glu Thr Phe Thr Asn Val Thr Glu Phe Glu Tyr Asp Ile 185 Leu Ala Lys Arg Leu Arg Glu Leu Ser Phe Leu Asn Ser Gly Val Ser 200 Ile Arg Leu Arg Asp Lys Arg Asp Asn Lys Glu Asp His Phe His Tyr 215 220 Glu Gly Gly Ile Lys Ala Phe Val Glu Tyr Leu Asn Lys Asn Lys Thr 230 Pro Ile His Pro Asn Ile Phe Tyr Phe Ser Thr Glu Lys Asp Gly Ile 245 250 Gly Val Glu Val Ala Leu Gln Trp Asn Asp Gly Phe Gln Glu Asn Ile 265 Tyr Cys Phe Thr Asn Asn Ile Pro Gln Arg Asp Gly Gly Thr His Leu 280 285 Ala Gly Phe Arg Ala Ala Met Thr Arg Thr Leu Asn Ala Tyr Met Asp 295 300 Lys Glu Gly Tyr Ser Lys Lys Ala Lys Val Ser Ala Thr Gly Asp Asp 310 315 Ala Arg Glu Gly Leu Ile Ala Val Val Ser Val Lys Val Pro Asp Pro 330 325 Lys Phe Ser Ser Gln Thr Lys Asp Lys Leu Val Ser Ser Glu Val Lys 345 Ser Ala Val Glu Gln Gln Met Asn Glu Leu Leu Ser Glu Tyr Leu Leu 360 Glu Asn Pro Ser Asp Ala Lys Ile Val Val Gly Lys Ile Ile Asp Ala 375 380 Ala Arg Ala Arg Glu Ala Ala Arg Lys Ala Arg Glu Met Thr Arg Arg 390 395 Lys Gly Ala Leu Asp Leu Ala Gly Leu Pro Gly Lys Leu Ala Asp Cys 405 410 Gln Glu Arg Asp Pro Ala Leu Ser Glu Leu Tyr Leu Val Glu Gly Asp 420 425 430 Ser Ala Gly Gly Ser Ala Lys Gln Gly Arg Asn Arg Lys Asn Gln Ala 435 440 445 Ile Leu Pro Leu Lys Gly Lys Ile Leu Asn Val Glu Lys Ala Arg Phe 455 460 Asp Lys Met Leu Ser Ser Gln Glu Val Ala Thr Leu Ile Thr Ala Leu 470 475 Gly Cys Gly Ile Gly Arg Asp Glu Tyr Asn Pro Asp Lys Leu Arg Tyr 485 490 His Ser Ile Ile Ile Met Thr Asp Ala Asp Val Asp Gly Ser His Ile 505 Arg Thr Leu Leu Thr Phe Phe Tyr Arg Gln Met Pro Glu Ile Val 520 Glu Arg Gly His Val Tyr Ile Ala Gln Pro Pro Leu Tyr Lys Val Lys 535 540 Lys Gly Lys Gln Glu Gln Tyr Ile Lys Asp Asp Asp Ala Met Asp Gln 550 555 Tyr Gln Ile Ala Ile Ala Leu Asp Gly Ala Thr Leu His Ala Asn Ser 565 570 Ser Ala Pro Ala Leu Ala Gly Glu Pro Leu Glu Arg Leu Val Ser Glu 585 Phe Asn Ala Thr Gln Lys Met Ile Gly Arg Met Glu Arg Arg Tyr Pro

<400> 9483

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600
Lys Ala Leu Leu Lys Glu Leu Ile Tyr Gln Pro Thr Leu Thr Glu Ala
                        615
                                            620
Asp Leu Ser Asn Glu Gln Thr Val Thr Arg Trp Val Asn Thr Leu Val
                    630
                                        635
Ser Glu Leu Asn Glu Lys Glu Gln His Gly Ser Gln Trp Lys Phe Asp
                                    650
                645
Val Gln Gln Asn Ala Glu Gln Gln Phe Glu Pro Ile Val Arg Val Arg
            660
                                665
                                                    670
Thr His Gly Val Asp Thr Asp Tyr Pro Leu Glu His Glu Phe Val Thr
                            680
                                                685
Gly Pro Glu Tyr Arg Arg Ile Cys Thr Leu Gly Glu Lys Leu Arg Gly
                        695
                                            700
Leu Ile Glu Asp Asp Ala Phe Ile Glu Arg Gly Glu Arg Arg Gln Pro
                    710
                                        715
Val Ala Ser Phe Glu Gln Ala Leu Glu Trp Leu Val Lys Glu Ser Arg
                                    730
Arg Gly Leu Ser Ile Gln Arg Tyr Lys Gly Leu Gly Glu Met Asn Pro
                                745
Asp Gln Leu Trp Glu Thr Thr Met Asp Pro Glu Ser Arg Arg Met Leu
                            760
Arg Val Thr Val Lys Asp Ala Ile Ala Ala Asp Gln Leu Phe Thr Thr
                        775
Leu Met Gly Asp Ala Val Glu Pro Arg Ala Phe Ile Glu Glu Asn
                    790
                                        795
Ala Leu Lys Ala Ala Asn Ile Asp Ile
<210> 9482
<211> 143
<212> PRT
<213> Enterobacter cloacae
<400> 9482
Phe Gln Glu His Leu Ser Met Arg Asn Phe Asp Leu Ser Pro Leu Tyr
                                    10
Arg Ser Ala Ile Gly Phe Asp Arg Leu Phe Asn His Leu Glu Asn Asn
                                25
Gln Ser Gln Ser Asn Gly Tyr Pro Pro Tyr Asn Val Glu Leu Val Asp
                            40
Glu Asn His Tyr Arg Ile Ala Ile Ala Val Ala Gly Phe Ala Glu Ser
                        55
Glu Leu Glu Ile Thr Ala Gln Asp Asn Leu Leu Val Val Lys Gly Ser
                   70
                                        75
His Ala Gly Glu Gln Lys Glu Arg Thr Tyr Leu Tyr Gln Gly Ile Ala
                                    90
                85
Glu Arg Asn Phe Glu Arg Lys Phe Gln Leu Ala Glu Asn Ile His Val
                                105
Lys Gly Ala Asn Leu Val Asn Gly Leu Leu Phe Ile Glu Leu Glu Arg
                           120
Val Ile Pro Glu Glu Lys Lys Pro Arg Arg Ile Glu Ile Asn
<210> 9483
<211> 493
<212> PRT
<213> Enterobacter cloacae
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Arg Ile Gln Ser Pro Gly Arg Thr Arg Cys Gly Ala Ala Arg Gln Arg

His Thr Gly Asp Cys Arg Ser Ala Arg Ser Ser Gly Ala Arg Pro Ala 25 Gly Ile Ala Asp Glu Asn Pro Phe Asn Lys Arg Thr Asn His Ser Asp 40 Arg Gly Tyr Ile Met Lys Lys Phe Ser Val Val Ile Ala Gly Gly Gly 55 Ser Thr Phe Thr Pro Gly Ile Val Leu Met Leu Leu Ala Asn Arg Asp 75 70 Arg Phe Pro Leu Arg Ala Leu Lys Phe Tyr Asp Asn Asp Gly Ala Arg 90 Gln Glu Ile Ile Ala Glu Ala Cys Lys Ile Ile Leu Lys Glu Gln Ala 100 105 Pro Glu Ile Glu Phe Ser Tyr Thr Thr Asp Pro Glu Ala Ala Phe Thr 120 Asp Val Asp Phe Val Met Ala His Ile Arg Val Gly Lys Tyr Pro Met 135 Arg Glu Lys Asp Glu Lys Ile Pro Leu Arg His Gly Val Leu Gly Gln 150 155 Glu Thr Cys Gly Pro Gly Gly Ile Ser Tyr Gly Met Arg Ser Ile Gly 165 170 Gly Val Leu Glu Leu Val Asp Tyr Met Glu Gln Tyr Ser Pro Asn Ala 185 Trp Met Leu Asn Tyr Ser Asn Pro Ala Ala Ile Val Ala Glu Ala Thr 200 Arg Arg Leu Arg Pro Asn Ala Lys Ile Leu Asn Ile Cys Asp Met Pro 215 220 Ile Gly Ile Glu Gly Arg Met Ala Gln Ile Val Gly Leu Lys Asp Arg 230 235 Lys Glu Met Arg Val Arg Tyr Tyr Gly Leu Asn His Phe Gly Trp Trp 245 250 Thr Ser Ile Glu Asp Gln Asn Gly Asn Asp Leu Met Pro Lys Leu Arg 265 Glu Tyr Val Ala Lys Asn Gly Tyr Val Pro Pro Ser Glu Asp Val His 280 Thr Glu Ala Ser Trp Asn Asp Thr Phe Ala Lys Ala Lys Asp Val Gln 295 300 Ala Leu Asp Pro Asp Thr Met Pro Asn Thr Tyr Leu Lys Tyr Tyr Leu 310 315 Phe Pro Asp Tyr Val Val Ala His Ser Asn Pro Glu Arg Thr Arg Ala 330 325 Asn Glu Val Met Asp His Arg Glu Lys His Val Phe Ser Ser Cys Arg 345 Ala Ile Ile Glu Ala Gly His Ser Ser Ala Gly Glu Leu Glu Ile Asp 360 Glu His Ala Ser Tyr Ile Val Asp Leu Ala Thr Ala Ile Ala Phe Asn 375 380 Thr Gln Glu Arg Met Leu Leu Ile Val Pro Asn Asn Gly Ala Ile His 395 Asn Phe Asp Ala Asp Ala Met Val Glu Ile Pro Cys Leu Val Gly His 410 Asn Gly Pro Glu Pro Leu Thr Val Gly Asp Ile Pro His Phe Gln Lys 425 420 Gly Leu Met Ser Gln Gln Val Ala Val Glu Lys Leu Val Val Asp Ala 440 Trp Glu Gln Arg Ser Tyr Gln Lys Leu Trp Gln Ala Ile Thr Leu Ser 455 460 Lys Thr Val Pro Ser Ala Ser Val Ala Lys Ala Ile Leu Asp Asp Leu 470 475 Ile Glu Ala Asn Lys Asp Tyr Trp Pro Glu Leu His 485

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<210> 9484
<211> 121
<212> PRT
<213> Enterobacter cloacae
<400> 9484
Cys Tyr Trp Cys Cys Met Pro Asp Ser Arg Lys Ala Arg Arg Glu Ala
Asp Pro Gly Leu Gln Pro Glu Arg Thr Ser Leu Ala Trp Leu Arg Thr
                                25
Leu Leu Gly Tyr Gly Ala Leu Ile Ala Leu Ala Ile Lys His Asn Trp
His Arg Thr Gly Ala Pro Phe Trp Ile Ser Ile Val Val Leu Ala Leu
Val Ala Ile Ile Leu Trp Arg Tyr Thr Arg Ser Arg Asn Leu Met Asp
                    70
                                        75
Val Ser Gln Asn Asp Phe Ala Gln Pro Lys Ala Val Arg Asp Lys Phe
                                    90
Leu Ile Ala Leu Ala Val Leu Ser Leu Ser Leu Leu Phe Ala Val Thr
                                105
His Ile Gln Gln Ile Leu His Leu
<210> 9485
<211> 114
<212> PRT
<213> Enterobacter cloacae
<400> 9485
Trp Gln Trp Thr Arg Gln Ala Ser Arg Met His Leu Ile Ser Met Lys
                                    10
Ala Ile Leu Asp Ala Val Ser Gln Phe Pro Gln His Arg Glu Glu Leu
                                25
Leu Phe Leu Gly Arg Val Ile Glu Lys Ser His Cys Pro Thr Pro Ala
                                                 4.5
                            40
Ala Leu Arg Lys Leu Phe Pro Thr Leu Asp Asn Phe Lys Tyr Leu Asp
                        55
Lys His Tyr Val Ile Asp Ile Ala Asn Asn Asn Leu Arg Val Val Ala
                    70
                                        75
Leu Ile Phe Phe Glu Ser Gln Lys Phe Tyr Val Arg His Val Phe Thr
                                    90
His Lys Glu Tyr Asp Arg Phe Thr Glu Lys His Arg Thr Lys Gly Lys
Lys
<210> 9486
<211> 256
<212> PRT
<213> Enterobacter cloacae
<400> 9486
Arg Arg Ser Thr Ser Trp Lys Thr Ser Pro Lys Trp Arg Ala Thr Ser
Pro Ile Pro Pro Cys Leu Thr Lys Leu Arg Cys Ser Ser Asn Arg Ser
Leu Lys Val Ser Val Phe Arg Ser Cys Arg Pro Asp Lys Arg Ser Ala
                            40
Ile Arg Leu Phe Gln Thr Ala Gly Thr His Met Thr Thr Ile Ala Leu
```

Ile Asp Asp His Leu Ile Val Arg Ser Gly Phe Ala Gln Leu Leu Asn

```
5091
                    70
                                        75
Leu Glu Pro Asp Phe Gln Val Val Ala Glu Phe Gly Ser Gly Arg Glu
                                    90
               85
Ala Leu Ala Gly Leu Pro Gly Arg Gly Val Gln Val Cys Ile Cys Asp
            100
                                105
Ile Ser Met Pro Asp Leu Ser Gly Leu Glu Leu Leu Ser Gln Leu Pro
                            120
                                                 125
Lys Gly Met Ala Thr Ile Met Leu Ser Val His Asp Ser Pro Ala Leu
                        135
                                             140
Val Glu Gln Ala Leu Asn Àla Gly Ala Arg Gly Phe Leu Ser Lys Arg
                    150
                                         155
Cys Ser Pro Asp Glu Leu Ile Ala Ala Val Arq Thr Val Ser Thr Gly
                                    170
Gly Cys Tyr Leu Thr Pro Asp Ile Ala Ile Lys Leu Ala Ala Gly Arg
Gln Asp Pro Leu Thr Arg Arg Glu Arg Gln Val Ala Glu Lys Leu Ala
                            200
Gln Gly Met Ser Val Lys Glu Ile Ala Val Glu Leu Gly Leu Ser Pro
                        215
Lys Thr Val His Val His Arg Ala Asn Leu Met Glu Lys Leu Asn Val
                    230
                                         235
Ser Asn Asp Val Glu Leu Ala Arg Arg Met Phe Asp Ser Trp Gln
<210> 9487
<211> 440
<212> PRT
<213> Enterobacter cloacae
<400> 9487
Gly Arg Ile Met Phe Lys Thr Pro Ala Ser Ala Ala Pro Leu Ser Asn
                                    10
Lys Ala Glu Ile Asp Ser Arg Tyr Arg Tyr Trp Arg Arg His Ile Leu
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20 25 Ile Thr Ile Trp Leu Gly Tyr Ala Leu Phe Tyr Phe Thr Arg Lys Ser 40 45 Phe Asn Ala Ala Pro Glu Ile Leu Ala Ser Gly Val Met Thr Arg 5.5 60 Thr Asp Ile Gly Leu Leu Ala Thr Leu Phe Tyr Ile Thr Tyr Gly Leu 75 70 Ser Lys Phe Phe Ser Gly Ile Val Ser Asp Arg Ser Asn Ala Arg Tyr 85 90 Phe Met Gly Val Gly Leu Ile Ala Thr Gly Val Val Asn Ile Leu Phe 100 105 Gly Phe Ser Thr Ser Leu Trp Ala Phe Ala Leu Leu Trp Ala Leu Asn 120 125 Ala Phe Phe Gln Gly Trp Gly Ala Pro Val Cys Ala Arg Leu Leu Thr 135 140 Ala Trp Tyr Ser Arg Asn Glu Arg Gly Gly Trp Trp Ala Ile Trp Asn 155 Thr Ala His Asn Val Gly Gly Ala Leu Ile Pro Met Val Val Gly Ala 170 Ala Ala Leu His Tyr Gly Trp Arg Ala Gly Met Met Ile Ala Gly Gly 185 Leu Ala Ile Val Ala Gly Leu Phe Leu Cys Trp Arg Leu Arg Asp Arg 200 Pro Gln Thr Val Gly Leu Pro Pro Val Gly Asp Trp Arg His Asp Glu 215 220 Met Glu Ile Ala Gln Gln Glu Gly Ala Gly Leu Ser Arg Gln Glu 235 230 Ile Leu Thr Lys Tyr Val Leu Lys Asn Pro Tyr Ile Trp Leu Leu Ser

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245
                                    250
Leu Cys Tyr Val Leu Val Tyr Val Val Arg Ala Ala Ile Asn Asp Trp
                                265
Gly Asn Leu Tyr Met Ser Glu Thr Leu Gly Val Asp Leu Val Thr Ala
                            280
Asn Ser Ala Val Thr Met Phe Glu Leu Gly Gly Phe Ile Gly Ala Leu
                        295
                                            300
Val Ala Gly Trp Gly Ser Asp Lys Leu Phe Asn Gly Asn Arg Gly Pro
                    310
                                        315
Met Asn Leu Ile Phe Ala Ala Gly Ile Leu Leu Ser Val Gly Ser Leu
                325
                                    330
Trp Leu Met Pro Phe Ala Ser Tyr Val Met Gln Ala Ala Cys Phe Phe
            340
                                345
Thr Ile Gly Phe Phe Val Phe Gly Pro Gln Met Leu Ile Gly Met Ala
                                                365
        355
                            360
Ala Ala Glu Cys Ser His Lys Glu Ala Ala Gly Ala Ala Thr Gly Phe
                        375
                                            380
Val Gly Leu Phe Ala Tyr Leu Gly Ala Ser Leu Ser Gly Trp Pro Leu
                    390
                                        395
Ala Arg Val Ile Asp Ile Trp His Trp Ser Gly Phe Phe Ala Val Ile
                405
                                    410
Ala Ile Ala Ala Gly Ile Ser Ala Leu Leu Leu Pro Phe Leu His
                                425
Ala Gln Ala Pro Arg Glu Ala
<210> 9488
<211> 508
<212> PRT
<213> Enterobacter cloacae
<400> 9488
Arg Ala Ser Pro Phe Ala Ala Glu Thr Arg Lys Thr Lys Lys Phe Ser
                                    10
Arg Phe His Leu Asp Ala Val Ser Gly Ile Ser Pro Gly Trp Phe Leu
                                25
Gln Cys Cys Lys Asn Gln Leu Arg Ser Lys Pro Thr Met Leu Ala Phe
                            40
Leu Asn Gln Val Arg Lys Pro Thr Leu Asp Leu Pro Leu Asp Val Arg
                        55
Arg Lys Met Trp Phe Lys Pro Phe Met Gln Ser Tyr Leu Val Val Phe
                    70
                                        75
Ile Gly Tyr Leu Thr Met Tyr Leu Ile Arg Lys Asn Phe Asn Ile Ala
               85
                                    90
Gln Asn Asp Met Ile Ser Thr Tyr Gly Leu Ser Met Thr Gln Leu Gly
           100
                                105
Met Ile Gly Leu Gly Phe Ser Ile Thr Tyr Gly Val Gly Lys Thr Val
                            120
                                                125
Val Ser Tyr Tyr Ala Asp Gly Lys Asn Thr Lys Gln Phe Leu Pro Phe
                        135
                                            140
Met Leu Ile Leu Ser Ala Ile Cys Met Leu Gly Phe Ser Ala Ser Met
                    150
                                        155
Gly Ala Gly Ser Val Ser Leu Phe Leu Met Ile Ala Phe Tyr Ala Leu
                                    170
Ser Gly Phe Phe Gln Ser Thr Gly Gly Ser Cys Ser Tyr Ser Thr Ile
                               185
Thr Lys Trp Thr Pro Arg Arg Lys Arg Gly Ser Tyr Leu Gly Met Trp
                           200
Asn Ile Ser His Asn Leu Gly Gly Ala Gly Ala Ala Gly Val Ala Leu
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215

Phe Gly Ala Asn Tyr Leu Phe Asp Gly His Val Ile Gly Met Phe Ile

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230
                                        235
Phe Pro Ser Ile Ile Ala Leu Ile Val Gly Phe Ile Gly Leu Arg Tyr
                245
                                    250
Gly Ser Asp Ser Pro Glu Ser Tyr Gly Leu Gly Lys Ala Glu Glu Leu
                                265
Phe Gly Glu Glu Ile Ser Glu Glu Asp Lys Asp Thr Glu Glu Asn Glu
                            280
                                                 285
Met Thr Lys Trp Gln Ile Phe Val Glu Tyr Val Leu Lys Asn Lys Val
                        295
                                            300
Ile Trp Leu Leu Cys Phe Ser Asn Ile Phe Leu Tyr Val Val Arg Ile
                    310
                                        315
Gly Ile Asp Gln Trp Ser Thr Val Tyr Ala Phe Gln Glu Leu Lys Leu
                                    330
                325
Ser Lys Glu Val Ala Ile Gln Gly Phe Thr Leu Phe Glu Val Gly Ala
            340
                                345
Leu Val Gly Thr Leu Leu Trp Gly Trp Leu Ser Asp Leu Ala Asn Gly
                            360
Arg Arg Ala Leu Val Ala Cys Ile Ala Leu Ala Leu Ile Ile Ala Thr
                        375
Leu Gly Val Tyr Gln His Ala Ser Asn Gln Tyr Val Tyr Leu Ala Ser
                    390
                                        395
Leu Phe Ala Leu Gly Phe Leu Val Phe Gly Pro Gln Leu Leu Ile Gly
                405
                                    410
Val Ala Ala Val Gly Phe Val Pro Lys Lys Ala Ile Gly Ala Ala Asp
                                425
Gly Ile Lys Gly Thr Phe Ala Tyr Leu Ile Gly Asp Ser Phe Ala Lys
        435
                            440
Leu Gly Leu Gly Met Ile Ala Asp Gly Thr Pro Ile Phe Gly Leu Thr
                        455
Gly Trp Ala Gly Thr Phe Ala Ala Leu Asp Ala Ala Ile Gly Cys
                    470
                                        475
Ile Val Leu Met Ala Met Val Ala Val Leu Glu Glu Arg Lys Ile Arg
                                    490
                485
Arg Glu Asn Arg Ala Gln Lys Leu Lys Val Ala
            500
<210> 9489
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<400> 9489

 Arg Val Met Met Met Met Ile Ala Leu Glu Glu Ala Val Met Glu Ile Ile

 1
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 Val Asn Ala Gly Gln Ser Arg Ser Leu Cys Phe Glu Ala Leu His Ala 20
 25
 30

 Ala Arg Gln Gly Asn Leu Asp Glu Ala Lys Ser Leu Leu Arg Glu Ala 35
 40
 45

 Asp Gly Tyr Ala Arg Gln Ala His Lys Met Gln Thr Lys Leu Ile Glu 50
 55
 60

 Gln Asp Ala Gly Glu Ala Arg Gln Pro Met Thr Leu Ile Met Val His 65
 70
 75
 80

 Ala Gln Asp His Leu Met Asn Ser Leu Leu Ala Arg Glu Leu Ser Glu 85
 90
 95

Glu Ile Ile His Leu Tyr Gln Arg 100 105

<sup>&</sup>lt;211> 105

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<sup>&</sup>lt;210> 9490

<sup>&</sup>lt;211> 469

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<400> 9490 Ile Lys Leu Asn Tyr Ile Glu Ile Thr Met Asn Thr Ile Lys Lys Leu 10 Pro Leu Thr Met Ala Val Ile Ala Ala Leu Cys Pro Ile Ser Val Leu Ala Gln Glu Phe Thr Gln Glu Gln Ile Asp Ala Ile Val Ala Lys Ala 40 Val Asp Lys Ala Leu Ala Glu Arg Gln Ala Lys Met Asp Ala Ala Val 55 Ala Lys Lys Ala Asp Val Val Thr Glu Pro Gln Ser Ala Ala Gln Ser 70 Pro Asp Met Ala Ile Pro Phe Gly Val Lys Phe Thr Gly Tyr Ala Arg 90 Tyr Gly Ala His Phe Gln Ala Ala Asp Gln Lys Tyr Val Ala Val Asp 105 Gly Ser Tyr Asn Gly Ala Ser Ala Ile Gly Arg Leu Gly Asn Glu Gly 120 Asn Gly Gly Glu Phe Gln Leu Ser Lys Ala Phe Lys Gly Glu Asn Gly 135 Ala Ile Trp Asp Ile Asn Val Met Ile Asp His Trp Gly Asp Glu Val 150 155 Asn Leu Lys Lys Ala Tyr Ala Gly Val Thr Asn Ile Met Ala Ser Asn 165 170 Pro Asn Ala Tyr Phe Trp Ala Gly Arg Asp Phe His Gln Arg Pro Gln 180 185 Gln Gly Ile Asn Asp Tyr Phe Trp Met Asn His Asp Gly Gln Gly Ala 200 195 Gly Val Lys Asn Phe Asp Ile Gly Gly Val Gln Phe Asp Val Ala Ala 215 220 Val Ala Ala Val Glu Ser Cys Ser Pro Glu Val Met Glu Asp Glu Ala 230 235 Asn Pro Ser Arg Ile Thr Cys Thr Gly Gly Ser Gly Thr Gly Asp Lys 245 250 Gly Asn Tyr Ala Ala Thr Ser Lys Ile His Gly Met Lys Leu Gly Pro 260 265 Leu Asp Leu Glu Leu Tyr Ala Asn Tyr Gly Phe Asp Ser Lys Ala Val 280 Glu Ser Asp Glu Arg Leu Asn Ala Trp Gln Gly Gly Val Val Leu Ser 300 295 His Thr Asn Asp Ser Gly Val Asn Lys Val Ile Ala Arg Tyr Ser Asp 310 315 Asn Ser Asp Asn Ser Val Phe Asn Lys Thr Glu Asp Leu Thr Thr Val 325 330 Tyr Ala Ser Phe Glu Gly Leu Tyr Lys Phe Thr Gln Ala Thr Gln Val 345 340 Glu Tyr İle Leu Ala Phe His Asp Tyr Asp Asn Ser Arg Asp Lys Thr 360 365 Asp Asn Arg Lys Asn Tyr Asn Ala Ile Val Arg Pro Met His Trp Trp 375 380 Asn Asp Val His Ser Thr Trp Leu Glu Ala Gly Trp Gln His Val Asp 390 395 Tyr Asp Asn Gly Gly Asp Asn Lys Gly Trp Lys Leu Thr Leu Ser Gln 405 410 Asn Met Ser Ile Ala Met Gly Pro Glu Phe Arg Pro Met Leu Arg Phe 425 Tyr Val Thr Gly Gly Lys Val Asp Asn Glu Arg Thr Ala Arg Val Asn 440 Asn Thr Lys Asp Glu Thr Leu Asp Asp Phe Asn Val Gly Ala Met Trp 455 450 Glu Ala Trp Phe

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<210> 9491
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 9491
Ser Lys Ser Lys Thr Ala Thr Lys Val Ala Val Phe Asn Val Arg Ser
                                    10
Leu Ser Pro Trp Glu Arg Ala Gly Val Arg Ala Ser Gly Arg Thr Gln
                                25
           20
Pro Cys Tyr Ala Val Asp Arg Ile Asn Asp Asn Ile Thr Gly Glu Asn
                            40
Met Gly Ser Thr Arg Lys Gly Met Leu Asn Val Leu Ile Ala Ala Val
                        55
                                            60
Leu Trp Gly Ser Ser Gly Val Cys Ala Gln Tyr Ile Met Glu Lys Ser
                   70
                                        75
His Ile Ser Ser Pro Tyr Leu Thr Met Val Arg Leu Leu Phe Thr Gly
                                   90
Val Ile Leu Leu Thr Leu Ser Phe Val His Gly Asp Lys Ile Phe Ser
Val Ile Lys Asn Arg Lys Asp Ala Leu Ser Leu Leu Phe Phe Ser Leu
                            120
Val Gly Ala Leu Thr Val Gln Leu Thr Phe Leu Leu Thr Ile Glu Lys
                        135
Ser Asn Ala Ala Thr Ala Thr Val Leu Gln Phe Leu Ser Pro Thr Ile
                   150
                                        155
Ile Val Ala Trp Phe Ala Leu Ala Arg Lys Thr Arg Pro Gly Ile Phe
               165
                                    170
Val Leu Ser Ala Ile Phe Thr Ser Leu Val Gly Thr Phe Leu Leu Val
                                185
Thr His Gly Asp Pro Thr Ser Leu Ser Ile Ser Pro Ala Ala Leu Phe
       195
                            200
Phe Gly Ile Ala Ser Ala Phe Ala Ala Phe Tyr Thr Thr Tyr Pro
                        215
                                            220
Ser Thr Leu Ile Ala Arg Tyr Gly Thr Leu Pro Ile Val Gly Trp Ser
                   230
                                        235
Met Leu Ile Ala Gly Leu Met Leu Thr Pro Phe Tyr Ala Gly Arg Gly
                                    250
               245
Thr Thr Phe Val Ile Asp Gly Gly Leu Leu Ala Phe Phe Tyr Leu
                                265
Val Val Ile Gly Thr Ala Leu Thr Phe Ser Leu Tyr Leu Lys Gly Ala
                            280
Gln Met Ile Gly Gly Pro Lys Ala Ser Ile Leu Ser Cys Ala Glu Pro
                                            300
                       295
Leu Ser Ser Ala Leu Leu Ser Val Val Leu Gly Val Ala Phe Thr
                   310
                                        315
Leu Pro Asp Trp Leu Gly Thr Leu Leu Ile Val Ser Ser Val Val Leu
                                   330
               325
Ile Ser Met Asp Ser Arg Arg Arg Val Lys Ala Ser Ala
                                345
<210> 9492
<211> 304
<212> PRT
<213> Enterobacter cloacae
<400> 9492
Gln Asn Ile Met Lys Ala Asp Leu Arg Thr Leu Asp Leu Asn Leu Leu
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Lys Thr Leu Asp Ala Leu Leu Asp Glu Arg Ser Val Thr Arg Ala Ala
                                25
Ala Arq Leu Ala Leu Thr Gln Pro Ala Val Ser Gly Met Leu Asn Arq
                            40
Leu Arg Asp Tyr Phe Asp Asp Pro Leu Phe Ile Arg Ala Pro His Gly
Met Val Pro Thr Thr Arg Ala Glu Ala Leu Ala Ala Pro Val Lys Arg
                    70
                                        75
IÍe Leu Ala Asp Ile Asp Val Leu Leu Gln Pro Val Ala Phe Asp Pro
               85
                                    90
Asn Thr Ala Arg Leu Thr Phe Thr Leu Ala Ala Thr Asp Tyr Ala Leu
                                105
            100
Arg Ala Val Val Pro Phe Ile Ala Ala Leu Lys Thr Gln Ala Pro
                            120
Gly Ile Arg Val Arg Val Val Pro Val Thr Pro Gly Ser Leu Val Ser
                        135
                                            140
Gln Leu Glu Gln Gly Ala Ile Asp Val Ala Leu Ile Thr Pro His Thr
                    150
                                        155
Thr Pro Asp Glu Leu His Ser Arg Ala Leu Tyr Asp Glu Arg Tyr Val
                                    170
Cys Met Met Arg Ala Asp His Pro Asn Ala Gly Glu Pro Met Thr Leu
            180
                                185
Asp Arg Phe Cys Ala Leu Glu His Val Leu Val Ser Tyr Glu Gly Asp
                            200
Gly Phe Arg Gly Val Thr Asp Ser Ala Leu Glu Lys Ile Gly Arg Thr
                        215
                                            220
Arg His Val Gly Leu Ser Val Ser His Phe Leu Val Leu Pro Asp Val
                    230
                                        235
Leu Ala Leu Ser Asp Met Ile Ala Val Val Pro Ser Arg Ile Ala Glu
                245
                                    250
Asn Gln Thr Gly Met Phe Ile Cys Glu Thr Pro Val Pro Val Pro Gly
            260
                                265
Phe Thr Lys Ser Met Ala Trp His Gly Arg Thr His Arg Asn Pro Ala
       275
                            280
                                                285
Gln Ala Trp Leu Arg Gly Leu Leu Gln Thr Ser Gln Arg Ala
                        295
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<210> 9493 <211> 447

<212> PRT

<213> Enterobacter cloacae

<400> 9493

Asp Met Gly Ser Gln Val Trp Val Val Ala Thr Leu Leu Val Ser Ile 10 Val Leu Ile Val Leu Thr Ile Val Lys Leu Lys Phe His Pro Phe Leu 25 Ala Leu Leu Ala Ser Phe Phe Val Gly Ala Met Met Gly Met Ser 40 Pro Leu Asp Met Val Asn Ala Ile Glu Ser Gly Ile Gly Gly Thr Leu Gly Phe Leu Ala Ala Val Ile Gly Leu Gly Thr Ile Leu Gly Lys Met 70 75 Met Glu Val Ser Gly Ala Ala Glu Arg Ile Gly Ile Thr Leu Gln Arg 90 Cys Arg Trp Leu Ser Ala Asp Val Ile Met Val Leu Val Gly Leu Ile 105 Cys Gly Ile Thr Leu Phe Val Glu Val Gly Val Val Leu Leu Ile Pro 120 Leu Ala Phe Ser Ile Ala Lys Lys Thr Asn Thr Ser Leu Leu Lys Leu 135

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Ala Ile Pro Leu Cys Thr Ala Leu Met Ala Val His Cys Val Val Pro
                                        155
                   150
Pro His Pro Ala Ala Leu Phe Val Thr Asn Lys Leu Gly Ala Asp Val
               165
                                    170
Gly Thr Val Ile Val Tyr Gly Leu Met Val Gly Leu Met Ala Ser Leu
                                185
Val Gly Gly Pro Leu Phe Leu Lys Leu Gly Asn His Leu Pro Tyr
                            200
Lys Pro Val Pro Ala Glu Phe Ser Asp Leu Lys Val Arg Glu Glu His
                                            220
                        215
Thr Leu Pro Ser Leu Gly Ala Thr Leu Phe Thr Val Leu Leu Pro Ile
                    230
                                        235
Ala Leu Met Leu Val Lys Thr Ile Ala Glu Leu Asn Met Ala Lys Glu
                                    250
                245
Gly Ser Leu Tyr Thr Leu Leu Glu Phe Ile Gly Asn Pro Ile Thr Ala
            260
                                265
Met Phe Ile Ala Val Phe Val Ala Tyr Tyr Leu Leu Gly Ile Arg Gln
                            280
His Met Gly Met Gly Ala Met Leu Thr His Thr Glu His Gly Phe Gly
                        295
Ser Ile Ala Asn Ile Leu Leu Ile Ile Gly Ala Gly Gly Ala Phe Asn
                    310
Ala Ile Leu Lys Thr Ser Gly Leu Ala Glu Thr Leu Ala His Ile Leu
               325
                                    330
Ser Asn Leu His Met His Pro Ile Leu Leu Ala Trp Leu Val Ala Leu
                                345
Val Leu His Ala Ala Val Gly Ser Ala Thr Val Ala Met Met Gly Ala
                            360
Thr Ala Ile Val Ala Pro Met Leu Pro Leu Tyr Pro Asn Val Ser Pro
                        375
Glu Ile Ile Thr Ile Ala Ile Gly Ser Gly Ala Ile Gly Cys Thr Ile
                    390
                                        395
Val Thr Asp Ser Leu Phe Trp Leu Val Lys Gln Tyr Cys Gly Ala Thr
               405
                                    410
Leu Asn Glu Thr Phe Lys Tyr Tyr Thr Thr Ala Thr Phe Ile Ala Ser
                                425
Val Leu Ala Leu Gly Gly Thr Phe Leu Leu Ser Phe Ile Ile
                            440
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<210> 9494

<211> 252

<212> PRT

<213> Enterobacter cloacae

<400> 9494

 Cys
 Ala
 Gln
 Arg
 Gly
 Leu
 Leu
 Val
 Ile
 Tyr
 Lys
 Ser
 Ile
 Ala
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 Arg

 Leu
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 Val
 Ala
 Arg
 Met
 Thr

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 Arg
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 Ala
 Leu
 Asp
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 Gly
 Leu
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Ser Arg Arg Val Arg Tyr Val Asp Gly Lys Pro Leu Met Leu Glu Asp 135 140 Ser Phe Met Pro Val Lys Leu Phe Arg Asn Leu Ser Leu Ala His Leu 150 155 Glu Gly Ser Lys Phe Asp Tyr Ile Glu Lys Glu Cys Gly Ile Thr Ile 170 165 Ser Gly Asn Tyr Glu Ser Leu Thr Pro Val Leu Ala Asp Lys Gln Leu 180 185 190 Ala Gly Tyr Met Asn Val Pro Glu Gln Thr Pro Leu Leu Arg Ile Thr 200 205 195 Ser Leu Ser Tyr Ser Asp Ser Gly Glu Phe Leu Asn Tyr Ser Val Met 215 220 Phe Arg Asn Thr Ser Asp Tyr Gln Val Asp Tyr His Leu Arg Arg Ile 230 235 His Pro Glu Asp Leu Leu Ala His Pro Pro Glu 245

<210> 9495

<211> 114

<212> PRT

<213> Enterobacter cloacae

<400> 9495

 Ile
 Thr
 Glu
 Ala
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 Asp
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 Arg
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 Leu
 Gly
 Glu
 Asp
 Lys
 Phe

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 Asn
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 Gln
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 Arg
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 Asp
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<210> 9496

<211> 456

<212> PRT

<213> Enterobacter cloacae

<400> 9496

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120
Asn Arg Asp Val Val Asp Ala Tyr Ala Arg Tyr Ala Gln Ile Cys Phe
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                        135
                                            140
Glu Leu Phe Gly Asp Arg Val Leu His Trp Phe Thr Phe Asn Glu Pro
                    150
                                        155
Ile Val Pro Val Glu Gly Gly Tyr Leu Tyr Asp Phe His Tyr Pro Asn
                                    170
                165
Val Val Asp Phe Arg Arg Ala Ala Thr Val Ala Tyr His Thr Val Leu
            180
                                185
Ala His Ala Lys Ala Val Gln Ala Tyr Arg Ala Gly His Tyr Ala Gly
                            200
                                                 205
Glu Ile Gly Ile Val Leu Asn Leu Thr Pro Ser Tyr Pro Arg Ser Gln
                        215
                                             220
Asn Pro Ala Asp Val Lys Ala Ala His Val Ala Asp Leu Met Phe Asn
                    230
Arg Ser Phe Leu Asp Pro Val Leu Arg Gly Glu Tyr Pro Ala Asp Leu
                245
                                    250
Val Ala Leu Leu Lys Ser Tyr Asp Gln Leu Pro Ala Cys Lys Pro Glu
            260
                                265
Asp Gly Phe Leu Ile Ala Glu Gly Lys Ile Asp Leu Leu Gly Ile Asn
                            280
        275
Tyr Tyr Gln Pro Arg Arg Val Lys Cys Arg Asp Ser Ala Val Asn Pro
    290
                        295
                                            300
Gln Ala Pro Phe Met Pro Glu Trp Phe Phe Asp Asn Tyr Glu Met Pro
                    310
                                        315
Gly Arg Lys Met Asn Pro Tyr Arg Gly Trp Glu Ile Tyr Glu Pro Gly
                                    330
                325
Ile Tyr Asp Ile Leu Val Asn Leu Arg Asp His Tyr Gly Asn Pro Arg
            340
                                345
Cys Phe Ile Ser Glu Asn Gly Met Gly Val Glu Asn Glu Gln Arg Phe
                            360
Ile Glu Asn Gly Gln Ile Asn Asp Gln Tyr Arg Ile Asp Phe Ile Ser
                        375
Glu His Leu Ser Trp Leu His Lys Gly Ile Ser Glu Gly Cys Asn Cys
                    390
                                        395
Leu Gly Tyr His Met Trp Thr Phe Ile Asp Asn Trp Ser Trp Cys Asn
                405
                                    410
                                                         415
Ala Tyr Lys Asn Arg Tyr Gly Phe Ile Gln Leu Asp Val Glu Thr Gln
           420
                                425
Gln Arg Thr Ile Lys Lys Ser Gly Glu Trp Phe Ala Ala Thr Ala Leu
                            440
Asn Asn Ser Phe Asp Lys Glu
   450
<210> 9497
<211> 285
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<212> PRT

<213> Enterobacter cloacae

<400> 9497

 His
 Phe
 Thr
 Asn
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 Phe
 Cys
 Ile
 Leu

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 Leu
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90
Pro Leu Met Arg Gly Thr Ala Pro Leu Leu Val Ala Leu Ile Ser Val
                                105
Met Val Leu Gly Asp His Leu Ser Arg Phe Ala Trp Ser Gly Ile Gly
                            120
                                                125
Val Ile Cys Leu Ser Ile Leu Ala Met Ala Met Asn Gly Arg Met Gln
                        135
                                            140
Ser Arg Lys Gly Leu Trp Leu Ala Leu Leu Asn Ala Cys Phe Ile Ala
                    150
                                        155
Gly Tyr Thr Leu Val Asp Gly Thr Gly Val Arg Leu Ser Asp Thr Ala
                                    170
                165
Leu Gly Tyr Thr Leu Trp Thr Phe Phe Met Asn Gly Phe Cys Leu Leu
                                185
Ser Trp Ala Met Val Ala Arg Arg Glu Ala Ser Ser Tyr Leu Arg
                            200
Leu His Trp Lys Lys Gly Leu Leu Gly Gly Val Gly Thr Met Gly Ser
                        215
Tyr Gly Leu Ala Leu Trp Ala Met Thr Gln Ala Pro Leu Ala Val Val
                    230
                                        235
Ala Ala Leu Arg Glu Thr Ser Ile Leu Phe Gly Ala Leu Ile Ala Phe
                245
                                    250
Val Leu Leu Lys Glu Lys Val Ala Gly Leu Arg Ile Ala Ala Leu
                                265
Gly Ile Ala Ala Gly Ala Ile Leu Leu Arg Leu Ala
                            280
                                                285
<210> 9498
<211> 112
<212> PRT
<213> Enterobacter cloacae
<400> 9498
Val Met Met Arg Asn Val Leu Ile Lys Leu Ala Thr Phe Ser Gly Val
                                    10
Val Leu Leu Cys Gly Cys Ser Ser Val Met Ser His Thr Gly Gly Lys
            20
                                25
Glu Gly Thr Tyr Pro Gly Thr Arg Ala Ser Ala Ala Met Ile Ser Asp
                            40
Asp Glu Thr Asn Trp Gly Thr Lys Ser Leu Ala Ile Leu Asp Met Pro
                        55
Phe Thr Ala Val Ala Asp Thr Leu Leu Pro Trp Asp Met Phe Arg
                    70
                                        75
Thr Asp Ser Ser Val Arg Ser Arg Val Glu Lys Ser Glu Gln Glu Thr
                                    90
Leu Ala Thr Asn Ser Val Ile Pro Pro Ala Ala Met Pro Pro Arg
                                105
            100
<210> 9499
<211> 316
<212> PRT
<213> Enterobacter cloacae
<400> 9499
Tyr Asn Ser Ser Met Thr Asp Thr Leu Lys Asp Ile Pro Val Phe Val
                                    10
Ala Ser Val Glu Ala Gly Ser Phe Ala Gln Ala Ala Val Arg Leu His
                                25
Leu Ser Arg Ser Ala Val Gly Lys Ser Ile Ala Arg Leu Glu Glu Arg
                           40
Leu Gly Val Arg Leu Phe His Arg Thr Thr Arg Ser Gln Arg Leu Thr
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Asp Asn Gly Ala Leu Phe Tyr Glu Arg Cys Leu Arg Ala Leu Glu Glu
                    70
Ile Arg Gly Ala Glu Ser Gln Leu Glu Thr Gly Lys His Gln Val Ser
                                    90
Gly Arg Leu Arg Val Ala Met Pro Val Leu Phe Gly Arg Gln Cys Ile
                                105
Ala Pro Leu Leu Ile Glu Leu Ala Gln Glu His Pro Gly Leu Glu Leu
                            120
                                                125
Glu Met Ser Phe Ser Asp Arg Ile Val Asp Leu Val Glu Glu Gly Phe
                        135
                                            140
Asp Met Ala Val Arg Asn Gly Thr Leu Ala Asp Ser Ala Val Leu Val
                    150
                                        155
Ala Arg Arg Leu Gly Val His Arg Met Val Leu Cys Ala Ala Pro Asp
                                    170
                165
Tyr Leu Ile Lys Asn Gly Gln Pro Gln Ser Val Asp Asp Leu Arg Gln
            180
                                185
Tyr Thr Ala Ile Asn Tyr Thr Arg Ala Gly Arg Val Leu Pro Trp Gln
                            200
Leu Met Asp Tyr Asp Gly Thr Ser Arg Thr Phe Ile Pro Arg Ser Ser
                        215
Leu Asn Met Asp Asp Leu Gln Ala Ile Cys Asp Ala Ala Leu Ala Gly
                    230
                                        235
His Gly Ile Ala Trp Leu Pro Cys Trp Met Val Ile Lys Glu Ile His
                245
                                    250
Gln Gly Asn Leu Val Pro Leu Phe Lys Gln Ala Pro Asp Val Arg Phe
                                265
Asp Val His Ala Val Trp Gln Gln Thr Pro His Leu Pro Leu Arg Val
                            280
Arg Ile Ala Ile Asp Met Leu Val Lys Arg Leu Pro Ala Val Met Ser
                        295
Leu Glu Phe Pro Ala Ser Ile Lys Lys Pro Arg
<210> 9500
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<210> 9500 <211> 482 <212> PRT

<213> Enterobacter cloacae

<400> 9500

Ser Ala Ala Ser Tyr Val Val Val Lys Arg Arg Leu Asn Ile Asp Ile 1 10 Arg Arg Leu Gln Gly Val Leu Phe Asp Glu Gly Ala Thr Trp Phe Asn 25 Arg Ile Ala His Gln Gly Arg Glu Gln Leu Ile Arg Cys Asp Cys Val 40 45 Phe Asn Gly Asp Ala Gln His Ala Thr Ala Phe Arg Ile His Ser Gly 55 Phe Pro Gln Leu Ile Arg Val His Phe Ala Gln Ala Phe Ile Thr Leu 70 75 Asn Arg Glu Ala Ala Thr Gly Leu Phe His Gln Pro Leu Gln Arg Leu 90 Phe Glu Ala Gly Tyr Arg Leu Thr Thr Leu Ala Thr Phe Asp Glu Arg 105 Val Val Phe Asp Gln Thr Thr Gln Leu Leu Ala Glu Gly Ala Asp Thr 120 Ala Val Phe Arg Thr Gly Asn Lys Leu Val Leu Gln Arg Val Val Gly 135 140 Ile Asp Ala Val Gly Thr His Ala Asn Asn Arg Leu Glu Leu Leu Leu 150 155 Ser Val Leu Leu Asn Val Glu Leu Pro Leu Ala Ala Val Leu Leu Phe 170

Leu Val Gln Leu Ala His Gln Gly Val His Pro Ala Gly Asp Gly Leu 185 180 Leu Val Ala Gln Ile Gly Phe Gly Gln Gly Arg Leu Ile Asn Gln Leu 200 205 Phe Gln Gln Arg Phe Arg Ile Ala Thr Leu His Thr Ala Asn His Phe 215 220 Leu Arg Gly Val Glu Leu Gly Asn Gln Thr Leu Gln Arg Leu Thr Gly 230 235 Gln Arg Trp Arg Ala Gly Val Cys Val Gln Gly Arg Thr Ile Lys Gly 250 245 Asp Arg Asp Leu Val Leu Ile His Arg Val Val Ile Phe Asn Val Leu 265 Phe Leu Leu Ala Phe Phe His Leu Val Gln Arg Trp Leu Arg Asn Val 275 280 Asp Val Ala Ala Leu Asn Asp Phe Arg His Leu Thr Ile Glu Glu Gly 295 Gln Gln Gln Arg Thr Asp Val Arg Ala Val Asp Val Arg Ile Gly His 310 315 Asp Asp Asp Ala Val Ile Thr Gln Phe Val Arg Val Val Leu Val Ala 325 Thr Asn Ala Ala Glu Arg Gly Asp Glu Arg Arg His Phe Leu Arg 340 345 Arg Glu His Leu Val Glu Ala Arg Phe Leu Asn Val Glu Asp Phe Thr 360 Leu Gln Arg Gln Asn Arg Leu Val Leu Ala Val Thr Ala Leu Leu Cys 375 380 Arg Thr Ala Arg Gly Val Pro Phe His Lys Val Gln Phe Arg Gln Arg 390 395 Arg Val Ala Phe Leu Thr Val Ser Gln Phe Ala Arg Gln Ala Cys Gln 405 410 Val Gln Arg Ala Phe Thr Thr Gly His Phe Thr Arg Phe Thr Arg Arg 425 420 Phe Thr Gly Thr Arg Arg Ile Asp Asn Phe Thr His His Asp Phe Arg 440 435 445 Val Gly Arg Val Phe Gln Gln Val Phe Ala Gln Gln Phe Val His Leu 455 460 Leu Phe Asn Arg Arg Phe His Leu Arg Arg Asp Gln Leu Val Phe Gly 465 470 475 Leu

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<210> 9501
<211> 353
<212> PRT
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<213> Enterobacter cloacae

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Thr Thr Phe Val Met Glu Val Val Phe Phe Val Val Ala Phe Val Ala
                            120
Gln Thr Asn Arg His Ala Gly Val Gln Glu Arg Gln Phe Thr Gln Ala
                        135
                                             140
Phe Arg Gln Asn Val Val Leu Glu Phe Gly Asp Val Gly Glu Gly Phe
                  150
                                        155
Lys Ala Arg Pro Glu Thr His His Gly Thr Gly Phe Leu Gly Ile Thr
                165
                                    170
Arg Asp Gly Gln Arg Arg Phe Arg His Ala Val Leu Val Asp Leu Thr
                                                     190
            180
                                185
Val Asn Phe Ala Phe Ala Leu Asp Asn Gln Leu Gln Leu Leu Arg Gln
        195
                            200
                                                 205
Gly Val Tyr Tyr Gly Tyr Ala Tyr Ala Val Gln Thr Ala Gly Asn Phe
                        215
                                             220
Ile Gly Val Ile Ile Glu Leu Thr Ala Cys Val Gln Asn Gly His Asp
                    230
                                         235
His Phe Arg Ser Arg Tyr Ala Leu Phe Arg Val Asn Thr Gly Trp Asp
                245
                                     250
Ala Thr Ala Val Ile Gly Asn Gly His Gly Val Val Arg Met Asp Arg
                                265
Asp His Asp Val Phe Thr Val Thr Arg Glu Arg Phe Val Asp Ser Val
                            280
Ile Tyr His Leu Glu Tyr His Val Val Gln Thr Gly Ala Val Ile Arg
                        295
                                             300
Val Ala Asp Ile His Thr Arg Ala Leu Thr His Arg Ile Gln Pro Phe
                    310
                                         315
Gln Asp Phe Asp Thr Gly Gly Val Ile Arg Ile Arg His Gln Arg Phe
                325
                                    330
Ser Leu Ile Ser Thr Trp Val Asn Pro Leu Phe Tyr Pro Phe Pro Arg
                                345
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<210> 9502
<211> 97
<212> PRT
<213> Enterobacter cloacae
```

<400> 9502

Ala Ser Phe Thr Arg Arg Ser Ser Gly Cys Arg Cys Val Gly Cys Val 10 15 Pro Ser Pro Gln Ser Arg Thr Tyr Val Arg Ser Trp Gly Phe Ala His 25 Leu Pro Pro Ser Cys Asn Pro Asn Tyr Leu Ala Tyr Pro Gly Gly Val 40 45 Leu Asn Glu Lys Pro Arg Pro Val Cys Ala Gly Gly Val Leu Asp Ser 55 60 Cys Val Asp Pro Val Pro Thr Ala His Cys Arg Arg Pro Pro Pro His 70 75 Ala Arg Arg Pro Leu Arg Gln Val Ala Gln Phe Leu Val Gly Ser Lys 90

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<210> 9503
<211> 410
<212> PRT
<213> Enterobacter cloacae
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<400> 9503

Ser Leu Ile Leu His Leu Ser Leu Leu Ala Lys Val Phe Ser Asp Met

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10
Lys Lys Gln Arg Asn Val Asn Leu Leu Leu Met Leu Val Leu Leu Val
Ala Val Gly Gln Met Ala Gln Thr Ile Tyr Ile Pro Ala Ile Ala Asp
Met Ala Lys Asp Leu Ser Val Arg Glu Gly Ala Val Gln Ser Val Met
                        55
Ala Ala Tyr Leu Leu Thr Tyr Gly Val Ser Gln Leu Val Tyr Gly Pro
                    70
                                        75
Leu Ser Asp Arg Val Gly Arg Arg Pro Val Ile Leu Val Gly Met Ser
                85
                                    90
Ile Phe Met Val Ala Thr Met Ile Ala Ile Thr Thr His Ser Leu Thr
                                105
            100
Val Leu Ile Ala Ala Ser Ala Leu Gln Gly Val Gly Thr Gly Val Gly
                            120
Gly Val Met Ala Arg Thr Leu Pro Arg Asp Met Tyr Gln Gly Thr Gln
                        135
Leu Arg His Ala Asn Ser Leu Leu Asn Met Gly Ile Leu Val Ser Pro
                    150
Leu Leu Ala Pro Leu Ile Gly Gly Leu Leu Asp Thr Val Trp Ser Trp
                                    170
Arg Ala Cys Tyr Ala Phe Leu Leu Val Leu Cys Ile Ile Val Thr Phe
            180
                                185
Ser Met Gly Arg Trp Met Pro Glu Thr Arg Pro Lys Asp Ala Pro Arg
        195
                            200
Thr Lys Leu Ile Ala Ser Tyr Lys Thr Leu Phe Gly Asn Gly Ser Phe
                        215
                                            220
Thr Cys Tyr Leu Leu Met Leu Ile Gly Gly Leu Ala Gly Ile Ala Val
                    230
                                        235
Phe Glu Ala Cys Ser Gly Val Leu Leu Gly Ala Gly Leu Gly Leu Ser
                245
                                    250
Ser Met Val Val Ser Ile Leu Phe Ile Leu Pro Ile Pro Ala Ala Phe
                                265
            260
Phe Gly Ala Trp Phe Ala Gly Arg Pro Asn Lys Arg Phe Ser Thr Leu
                            280
Met Trp Gln Ser Val Ile Ser Cys Leu Leu Ala Gly Leu Met Met Trp
                        295
                                            300
Ile Pro Gly Leu Phe Asp Val Met Ser Val Trp Thr Leu Leu Ile Pro
                                        315
                    310
Ala Ala Leu Phe Phe Phe Gly Ala Gly Met Leu Phe Pro Leu Ala Thr
                325
                                    330
Ser Gly Ala Met Glu Pro Phe Pro Phe Leu Ala Gly Thr Ala Gly Ala
            340
                                345
Leu Val Gly Gly Leu Gln Asn Ile Gly Ser Gly Ala Leu Ala Trp Leu
                            360
Ser Ala Met Met Pro Gln Thr Gly Gln Ala Ser Leu Gly Leu Leu Met
                        375
                                            380
Thr Leu Met Gly Leu Leu Ile Leu Leu Cys Trp Leu Pro Leu Ala Ser
                                        395
                    390
Arg Val Ser His His Glu Gln Pro Val
```

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<210> 9504
```

## <400> 9504

<sup>&</sup>lt;211> 463

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

Asp Leu Gln Ile Leu Tyr Asp Gly Asp Val Tyr Arg Leu Gly Ala Cys 1 5 10 15

Thr Trp Arg His Ile Pro Ala Phe Phe His Tyr Leu Ser Ala Lys Arg

			20					25					30		_
Arg	Ile	Met 35	Glu	Asn	Ala	Thr	Ile 40	Thr	Thr	Leu	Thr	Ala 45	Gln	Phe	Pro
Leu	Val 50	Glu	Asp	Leu	Ile	Ala 55	Leu	Lys	Glu	Thr	Thr 60	Trp	Leu	Asn	Pro
Arg 65	Thr	Thr	Thr	Leu	Ala 70	Glu	Gly	Leu	Pro	Tyr 75	Val	Gly	Leu	Thr	Lys 80
Ala	Asp	Val	Asp	Asp 85	Ala	His	Ala	Arg	Leu 90	Lys	Arg	Phe	Ala	Pro 95	Tyr
Leu	Ala	Lys	Ala 100	Phe	Pro	Glu	Thr	Ala 105	Ala	Thr	Gly	Gly	Ile 110	Ile	Glu
Ser	Asp	Leu 115	Val	Ala	Ile	Pro	Ala 120	Met	Gln	Ala	Arg	Leu 125	Glu	Lys	Glu
Phe	Ala 130	Lys	Pro	Val	Thr	Gly 135	Pro	Leu	Leu	Leu	Lys 140	Lys	Asp	Ser	His
Leu 145	Pro	Ile	Ser	Gly	Ser 150	Ile	Lys	Ala	Arg	Gly 155	Gly	Ile	Tyr	Glu	Val 160
Leu	Thr	His	Ala	Glu 165	Lys	Leu	Ala	Leu	Glu 170	Ala	Gly	Leu	Leu	Ser 175	Val
		_	Tyr 180					185					190		
		195	Ser				200					205			
	210		Met			215					220				
Ser 225	Ala	Asp	Ala	Arg	Glu 230	Trp	Lys	Lys	Ala	Lys 235	Leu	Arg	Ser	His	Gly 240
Val	Ile	Val	Val	Glu 245	Tyr	Glu	Gln	Asp	Tyr 250	Gly	Val	Ala	Val	Glu 255	Gln
_	_	_	Ala 260				_	265		_			270		
Glu	Asn	Ser 275	Arg	Thr	Leu	Phe	Leu 280	Gly	Tyr	Ala	Val	Ala 285	Gly	Glu	Arg
	290		Gln			295					300				
305		_		_	310		_			315		_			Gly 320
			Gly	325					330					335	
			Pro 340					345					350		
		355	Asp				360					365			
	370					375					380				Gly
385			Glu		390					395					400
Ser	Met	Tyr	Asp	Met 405	Leu	Gly	Trp	Leu	Ala 410	Gln	Glu	Glu	Arg	Ile 415	Arg
			Ser 420					425					430		
Ala	Asp	Glu 435	Asn	Val	Thr	His	Leu 440	Val	Trp	Ala	Thr	Gly 445	Gly	Gly	Met
Val	Pro 450	Glu	Asp	Glu	Met	Ala 455	Lys	Tyr	Leu	Ala	Lys 460	Gly	Lys		

<sup>&</sup>lt;210> 9505 <211> 661 <212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<400> 9505 His Leu Thr Arg Arg Lys Lys Ala Met Ser Gln Ile His Lys His Asp 10 Ile Pro Ala Asn Ile Ala Asp Arg Cys Leu Ile Ser Pro Glu Gln Tyr 25 Gln Glu Lys Tyr Gln Gln Ser Val Ser Ser Pro Asp Ala Phe Trp Gly 35 40 Glu Gln Gly His Ile Leu Asp Trp Ile Lys Pro Tyr Gln Lys Val Lys 55 Asn Thr Ser Phe Ala Pro Gly Asn Val Ser Ile Lys Trp Tyr Glu Asp 70 Gly Thr Leu Asn Leu Ala Ala Asn Cys Leu Asp Arg His Leu Ala Glu 90 Arg Gly Asn Glu Thr Ala Ile Ile Trp Glu Gly Asp Asp Ala Ser Gln 100 105 Ser Lys His Ile Ser Tyr Lys Glu Leu His Arg Asp Val Cys Arg Phe 120 Ala Asn Val Leu Leu Ala Gln Gly Ile Lys Lys Gly Asp Val Val Ala 135 Ile Tyr Met Pro Met Val Pro Glu Ala Ala Val Ala Met Leu Ala Cys 150 155 Ala Arg Ile Gly Ala Ile His Ser Val Ile Phe Gly Gly Phe Ser Pro 165 170 Glu Ala Val Ala Gly Arg Ile Val Asp Ser Asn Ser Lys Leu Val Ile 180 185 Thr Ala Asp Glu Gly Val Arg Ala Gly Arg Gly Ile Pro Leu Lys Lys 195 200 Asn Val Asp Glu Ala Leu Lys Asn Pro Asn Val Lys Ser Ile Ser Asn 215 220 Val Ile Val Phe Lys Arg Thr Gly Gly Lys Ile Asp Trp His Glu Gly 230 235 Arg Asp Leu Trp Trp Ser Asp Leu Ile Glu Lys Ala Ser Asp Gln His 245 250 Gln Pro Glu Glu Met Asn Ala Glu Asp Pro Leu Phe Ile Leu Tyr Thr 260 . 265 Ser Gly Ser Thr Gly Lys Pro Lys Gly Val Leu His Thr Thr Gly Gly 285 275 280 Tyr Leu Val Tyr Ala Ala Thr Thr Phe Lys Tyr Val Phe Asp Tyr His 300 295 Pro Gly Asp Ile Tyr Trp Cys Thr Ala Asp Val Gly Trp Val Thr Gly 310 315 His Ser Tyr Leu Leu Tyr Gly Pro Leu Ala Cys Gly Ala Thr Thr Leu 325 330 Met Phe Glu Gly Val Pro Asn Trp Pro Thr Pro Ala Arg Met Cys Gln 345 Val Val Asp Lys His Gln Val Asn Ile Leu Tyr Thr Ala Pro Thr Ala 355 360 365 Ile Arg Ala Leu Met Ala Glu Gly Asp Lys Ala Ile Glu Gly Thr Asp 375 380 Arg Ser Ser Leu Arg Ile Leu Gly Ser Val Gly Glu Pro Ile Asn Pro 390 395 Glu Ala Trp Glu Trp Tyr Trp Lys Lys Ile Gly Asn Glu Lys Cys Pro 410 Val Met Asp Thr Trp Trp Gln Thr Glu Thr Gly Gly Phe Met Ile Thr 425 Pro Met Pro Gly Ala Thr Gln Leu Lys Ala Gly Ser Ala Thr Arg Pro 440 Phe Phe Gly Val Gln Pro Ala Leu Val Asp Asn Glu Gly Asn Pro Gln 455 460 Glu Gly Ala Thr Glu Gly Asn Leu Val Ile Val Asp Ser Trp Pro Gly 470 475

Gln Ala Arg Thr Leu Phe Gly Asp His Glu Arg Phe Glu Gln Thr Tyr 490 Phe Ser Thr Phe Lys Asn Met Tyr Phe Ser Gly Asp Gly Ala Arg Arg 505 Asp Glu Asp Gly Tyr Tyr Trp Ile Thr Gly Arg Val Asp Asp Val Leu 520 525 Asn Val Ser Gly His Arg Leu Gly Thr Ala Glu Ile Glu Ser Ala Leu 535 540 Val Ser His Pro Lys Ile Ala Glu Ala Ala Val Val Gly Ile Pro His 550 555 Asn Ile Lys Gly Gln Ala Ile Tyr Ala Tyr Val Thr Leu Asn His Gly 570 565 Glu Glu Pro Ser Pro Glu Leu Tyr Thr Glu Val Arg Asn Trp Val Arg 580 585 590 Lys Glu Ile Gly Pro Leu Ala Thr Pro Asp Val Leu His Trp Thr Asp 600 605 Ser Leu Pro Lys Thr Arg Ser Gly Lys Ile Met Arg Arg Ile Leu Arg 615 620 Lys Ile Ala Ala Gly Asp Thr Ser Asn Leu Gly Asp Thr Ser Thr Leu 630 635 Ala Asp Pro Gly Val Val Asp Lys Leu Leu Glu Glu Lys Gln Ala Ile 650 Ala Met Pro Ser 660

<210> 9506

<211> 560 <212> PRT

<213> Enterobacter cloacae

<400> 9506

Gln Arg Ser Ser Ala Arg Gly Lys Ser Ile Met Lys Arg Ile Leu Thr 10 Ala Leu Ala Ala Thr Leu Pro Phe Ala Ala His Ala Ala Asp Ala Ile 20 25 Thr Gly Glu Val Gln Arg Gln Pro Thr Asn Trp Gln Ala Ile Ile Met 40 Phe Leu Ile Phe Val Val Leu Thr Leu Tyr Ile Thr Tyr Trp Ala Ser 55 Lys Gln Val Arg Ser Arg Asn Asp Tyr Tyr Thr Ala Gly Gly Asn Ile 75 Thr Gly Phe Gln Asn Gly Leu Ala Ile Ala Gly Asp Phe Met Ser Ala 90 Ala Ser Phe Leu Gly Ile Ser Ala Leu Val Tyr Thr Ser Gly Tyr Asp 105 100 Gly Leu Ile Tyr Ser Leu Gly Phe Leu Val Gly Trp Pro Ile Ile Leu 120 125 Phe Leu Ile Ala Glu Arg Leu Arg Asn Leu Gly Arg Tyr Thr Phe Ala 135 140 Asp Val Ala Ser Tyr Arg Leu Lys Gln Gly Pro Ile Arg Thr Leu Ser 150 155 Ala Cys Gly Ser Leu Val Val Val Ala Leu Tyr Leu Ile Ala Gln Met 170 Val Gly Ala Gly Lys Leu Ile Glu Leu Leu Phe Gly Leu Asn Tyr His 185 Ile Ala Val Val Leu Val Gly Val Leu Met Val Met Tyr Val Leu Phe 200 Gly Gly Met Leu Ala Thr Thr Trp Val Gln Ile Ile Lys Ala Val Leu 215 220 Leu Leu Phe Gly Ala Ser Phe Met Ala Phe Met Val Met Lys His Val 235

Gly Phe Ser Phe Asn Asn Leu Phe Thr Glu Ala Met Ser Val His Pro 245 250 Lys Gly Glu Ala Ile Met Ser Pro Gly Gly Leu Val Lys Asp Pro Ile 265 270 Ser Ala Leu Ser Leu Gly Leu Gly Leu Met Phe Gly Thr Ala Gly Leu 280 Pro His Ile Leu Met Arg Phe Phe Thr Val Ser Asp Ala Arg Glu Ala 295 300 Arg Lys Ser Val Phe Tyr Ala Thr Gly Phe Met Gly Tyr Phe Tyr Ile 310 315 Leu Thr Phe Ile Gly Phe Gly Ala Ile Met Leu Val Gly Ala Asn 325 330 Pro Ala Phe Lys Asp Ala Ala Gly Ala Leu Ile Gly Gly Asn Asn Met 340 345 Ala Ala Val His Leu Ala Asp Ala Val Gly Gly Asn Leu Phe Leu Gly 360 Phe Ile Ser Ala Val Ala Phe Ala Thr Ile Leu Ala Val Val Ala Gly 375 Leu Thr Leu Ala Gly Ala Ser Ala Val Ser His Asp Leu Tyr Ala Asn 390 Val Phe Arg Lys Gly Ala Ser Glu Arg Asp Glu Leu Lys Val Ser Lys 405 410 Ile Thr Val Leu Val Leu Gly Val Val Ala Ile Leu Leu Gly Ile Leu 425 430 420 Phe Glu Lys Gln Asn Ile Ala Phe Met Val Gly Leu Ala Phe Ser Ile 435 440 Ala Ala Ser Cys Asn Phe Pro Ile Ile Leu Leu Ser Met Tyr Trp Ser 455 460 Lys Leu Thr Thr Arg Gly Ala Met Ile Gly Gly Trp Leu Gly Leu Leu 470 475 Thr Ala Val Ile Leu Met Ile Leu Gly Pro Thr Ile Trp Val Gln Ile 490 485 Leu Gly His Glu Ser Ala Ile Phe Pro Tyr Glu Tyr Pro Ala Leu Phe 500 505 Ser Ile Ala Val Ala Phe Ile Gly Ile Trp Val Phe Ser Ala Thr Asp 520 525 Asn Ser Pro Glu Gly Asn Leu Glu Arg Glu Lys Phe Arg Ala Gln Phe 535 540 Ile Arg Ser Gln Thr Gly Leu Gly Val Glu Gln Gly Arg Ala His 550 <210> 9507

<211> 401

<212> PRT

<213> Enterobacter cloacae

<400> 9507

 Arg
 Met
 Ala
 Asp
 Met
 Lys
 Ile
 Lys
 Thr
 Gly
 Ala
 Arg
 Val
 Phe
 Ala
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 Ile
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 Ala
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 Ala
 Leu
 Ala
 Lys
 Ile

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 Leu
 Ala
 Met
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Lys Ala Phe Gln Asp Lys Leu Phe Pro Phe Thr Trp Asp Ala Val Arg 120 Tyr Asn Gly Lys Leu Ile Ala Tyr Pro Ile Ala Val Glu Ala Leu Ser 135 Leu Ile Tyr Asn Lys Asp Leu Val Pro Asn Pro Pro Lys Thr Trp Glu 150 Glu Ile Pro Ala Leu Asp Lys Glu Leu Lys Ala Lys Gly Lys Ser Ala 165 170 Leu Met Phe Asn Leu Gln Glu Pro Tyr Phe Thr Trp Pro Leu Ile Ala 185 Ala Asp Gly Gly Tyr Ala Phe Lys Phe Glu Asn Gly Lys Tyr Asp Val 200 205 Lys Asp Val Gly Val Asp Ser Ala Gly Ala Lys Lys Gly Leu Thr Phe 220 215 210 Leu Val Asp Leu Ile Lys Asn Lys His Met Asn Ala Asp Thr Asp Tyr 230 235 Ser Ile Ala Glu Ala Ala Phe Asn Lys Gly Glu Thr Ala Met Thr Ile 250 245 Asn Gly Pro Trp Ala Trp Thr Asn Ile Asp Lys Ser Lys Ile Asn Tyr 265 Gly Val Thr Leu Leu Pro Thr Phe Asn Gly Lys Pro Ser Lys Pro Phe 280 Val Gly Val Leu Ser Ala Gly Ile Asn Ala Ala Ser Pro Asn Lys Glu 295 Leu Ala Lys Glu Phe Leu Glu Asn Tyr Leu Leu Thr Asp Gln Gly Leu Asp Glu Val Asn Lys Asp Lys Pro Leu Gly Ala Val Ala Leu Lys Ser 330 325 Phe Gln Asp Gln Leu Ala Lys Asp Pro Arg Ile Ala Ala Thr Met Asp 345 Asn Ala Gln Lys Gly Glu Ile Met Pro Asn Ile Pro Gln Met Ala Ala 360 Phe Trp Tyr Ala Thr Arg Thr Ala Val Ile Asn Ala Ala Ser Gly Arg 375 Gln Thr Val Asp Ala Ala Leu Lys Asp Ala Gln Gly Arg Ile Thr Lys

```
<210> 9508
<211> 303
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
```

<400> 9508

<222>(248)

 Leu Arg Arg Arg
 Ala Leu Asn Met Ala Met Val Gln Pro Lys Ser Gln Lys

 1
 5
 10
 15

 Leu Arg Leu Leu Ala Thr His Leu Gly Leu Leu Ile Phe Ile Ala Ala 20
 25
 30

 Ile Met Phe Pro Leu Leu Met Val Ile Ala Ile Ser Leu Arg Ser Gly 35
 40
 45

 Asn Phe Ala Thr Gly Ser Leu Ile Pro Asp Glu Ile Ser Trp Glu His 50
 55
 60

 Trp Lys Leu Ala Leu Gly Phe Ser Val Glu His Ala Asp Gly Arg Val 65
 70
 75
 80

 Thr Pro Pro Pro Phe Pro Val Leu Leu Trp Leu Trp Asn Ser Val Lys
 90
 95

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Val Ala Thr Ile Thr Ala Ile Gly Ile Val Thr Leu Ser Thr Thr Cys
                                105
Ala Tyr Ala Phe Ala Arg Met Arg Phe Pro Gly Lys Ala Thr Leu Leu
                            120
Lys Val Met Leu Ile Phe Gln Met Phe Pro Ala Val Leu Ser Leu Val
                        135
                                             140
Ala Leu Tyr Ala Val Phe Asp Arg Leu Gly Gln Tyr Val Pro Phe Ile
                    150
                                        155
Gly Leu Asn Thr His Gly Gly Val Ile Phe Ala Tyr Leu Gly Gly Ile
                                    170
                165
Ala Leu His Val Trp Thr Ile Lys Gly Tyr Phe Glu Thr Ile Asp Gly
                                185
Ser Leu Glu Glu Ala Ala Ala Leu Asp Gly Ala Thr Pro Trp Gln Ala
                            200
Phe Arg Leu Val Leu Leu Pro Leu Ser Val Pro Ile Leu Ala Val Val
    210
                        215
                                             220
Phe Ile Leu Ser Phe Ile Ala Ala Ile Thr Glu Val Pro Val Ala Ser
                    230
Leu Leu Arg Asp Val Asn Xaa Tyr Thr Leu Ala Val Gly Met Gln
                245
                                    250
Gln Tyr Leu Asn Pro Gln Asn Tyr Leu Trp Gly Asp Phe Ala Ala Ala
                                265
Ala Val Leu Ser Ala Ile Pro Ile Thr Val Val Phe Leu Leu Ala Gln
                            280
Arg Trp Leu Val Asn Gly Leu Thr Ala Gly Gly Val Lys Gly
    290
                        295
<210> 9509
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 9509
Ala Asp Leu Gln Pro Gly Cys Ser Pro Gln Ala Gly Cys Arg Arg Arg
                                    10
Ala Thr Phe Ser Arg Cys Gly Asn Ala Ala Ser Arg Trp Trp Pro Asp
                                25
Pro Ala Ser Pro Ile Ser Ala Ala Arg Phe His Arg Lys Arg Ala Pro
                                                 45
                            40
Gln Thr Val Ala Asp His Arg Leu Ala Ala Cys Thr Gly Trp His Thr
                        55
Ala Cys Ser Glu Val Arg His Arg Ser Asp Ala Arg Pro Ala Cys Arg
                    70
                                        75
Thr Cys Cys Pro Thr Val Ser Gly Pro Ala Leu Trp Trp
<210> 9510
<211> 116
<212> PRT
<213> Enterobacter cloacae
<400> 9510
Asn Lys Pro Thr Leu Leu Glu Ile Ser Val Met Asn Asn Asp Ile
Cys Gln Gln Ile Glu Asn Ser Ala His Tyr Arg Glu Leu Val Glu Lys
                                25
Arg Gln Arg Phe Ala Phe Leu Leu Ser Ile Ile Met Leu Ile Ile Tyr
                            40
Val Gly Phe Ile Leu Leu Ile Ala Phe Ala Pro His Trp Leu Gly Thr
```

Pro Leu His Glu Gly Thr Ser Val Thr Arg Gly Ile Pro Ile Gly Ile

```
70
Gly Val Ile Ile Ser Phe Val Leu Thr Gly Val Tyr Val Trp Arg
               85
Ala Asn Gly Glu Phe Asp Arg Leu Asn Arg Glu Val Leu Arg Glu Val
Lys Ala Ser
       115
<210> 9511
<211> 299
<212> PRT
<213> Enterobacter cloacae
<400> 9511
Phe Arg Gly Ile Ile Met Asp Ile Arg Thr Leu Arg Tyr Phe Val Glu
Val Val Arg Gln Gln Ser Phe Thr Arg Ala Ala Glu Lys Leu Phe Val
           20
Thr Gln Pro Thr Ile Ser Lys Met Leu Lys Asn Leu Glu Asp Glu Leu
Asn Cys Thr Leu Leu Ile Arg Asp Gly Arg Lys Leu Leu Leu Thr Asp
Thr Gly Arg Val Val Phe Glu Arg Gly Leu Ala Ile Leu Ala Glu Phe
Arg Gln Leu Glu Ala Glu Leu Gly Asp Ile Asn His Leu Thr Lys Gly
Leu Leu Arg Leu Gly Ile Pro Pro Met Val Gly Met Met Ala Gly
                                105
Pro Ile Ser Leu Phe Arg Gln Arg Tyr Pro Gly Val Glu Leu Lys Ile
       115
                            120
Ser Glu Phe Gly Gly Leu Thr Val Gln Gln Ala Val Met Asn Gly Glu
                       135
                                            140
Leu Asp Val Ala Met Thr Ala Leu Pro Val Glu Glu Glu Ser Gly Leu
                   150
                                        155
Ala Thr Leu Pro Leu Phe Ser His Pro Leu Cys Val Leu Val Pro Arg
               165
                                    170
Ser Gly Asp Trp Leu Lys Ile Asp Ala Val Lys Pro Glu Leu Leu Gly
           180
                               185
                                                    190
Glu His Pro Leu Leu Ile Tyr Asn Glu Asp Phe Ala Leu Ser Arg Gln
                            200
Leu Met Ala Leu Phe Asn Gln His Asn Val Lys Pro Arg Ile Ala Val
                       215
                                            220
Arg Ser Gly Gln Trp Asp Phe Leu Ala Ala Met Val Gln Ala Gly Val
                   230
                                        235
Gly Ile Ala Ile Leu Pro Gln Pro Ile Cys Glu Arg Leu Asp Lys Asn
               245
                                    250
Thr Leu Arg Trp Ile Pro Leu Glu Ser Asp Leu His Trp Gln Leu Gly
                               265
                                                    270
Met Ile Trp Arg Glu Gly Val Tyr Leu Ser His Ser Ala Gln Ala Trp
                           280
Leu Gln Cys Cys Glu Gly Phe Trp Val Pro
<210> 9512
<211> 80
<212> PRT
<213> Enterobacter cloacae
<400> 9512
Lys Val Gly Leu Phe Glu Arg Tyr Leu Gln Arg Met Phe Arg Thr Val
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 Met
 His
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 Arg
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 Asp
 Ile
 Ala

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 Gly
 Tyr
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 Thr
 Phe
 Ser
 Arg
 Val
 Phe
 Arg

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 Glu
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 Asp
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 Thr
 Pro
 Ser
 Asp
 Tyr
 Arg
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 Gln
 Leu
 Asn

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<210> 9513

<211> 111

<212> PRT

<213> Enterobacter cloacae

<400> 9513

 Arg Glu Thr Leu
 Phe His Ser Ser Ser Ser Val Leu
 Ser Arg Met Ser 10
 15

 Phe Met Ala Thr Ile Thr Thr Ser Met Val Leu
 Leu Arg Trp Pro Leu 25
 30

 Leu Ser Ala Val Leu Met Phe Leu Ala Ser Thr Leu Asn Ile Gln Phe 35
 40
 45

 Arg Lys Ser Asp Tyr Ala Gly Leu Ala Val Ile Ser Thr Leu Leu Gly 50
 55
 60

 Leu Gly Ala Ala Cys Trp Phe Ala Thr Gly Leu Leu Gly 11e Thr Leu 65
 70
 75

 Val Asp Ile Ala Ala Val Trp Glu Asn Ile Lys Val Val Met Val Glu 85
 90
 95

 Ala Met Ser His Thr Pro Pro Asp Trp Pro Met Val Ile Thr

105

<210> 9514

<211> 941

<212> PRT

<213> Enterobacter cloacae

<400> 9514

Met Asp Lys Ile Glu Val Arg Gly Ala Arg Thr His Asn Leu Lys Asn 10 Ile Asn Leu Ile Ile Pro Arg Asp Lys Leu Ile Val Val Thr Gly Leu 25 Ser Gly Ser Gly Lys Ser Ser Leu Ala Phe Asp Thr Leu Tyr Ala Glu 40 45 Gly Gln Arg Arg Tyr Val Glu Ser Leu Ser Ala Tyr Ala Arg Gln Phe 55 60 Leu Ser Leu Met Glu Lys Pro Asp Val Asp His Ile Glu Gly Leu Ser 70 75 Pro Ala Ile Ser Ile Glu Gln Lys Ser Thr Ser His Asn Pro Arg Ser 85 90 Thr Val Gly Thr Ile Thr Glu Ile His Asp Tyr Leu Arg Leu Leu Tyr 105 Ala Arg Val Gly Glu Pro Arg Cys Pro Asp His Asp Val Pro Leu Ala 120 Ala Gln Thr Val Ser Gln Met Val Asp Asn Val Leu Ser Gln Pro Glu 135 140 Gly Lys Arg Leu Met Leu Leu Ala Pro Ile Ile Lys Glu Arg Lys Gly 150 155 Glu His Thr Lys Thr Leu Glu Asn Leu Ala Ser Gln Gly Tyr Ile Arg 170 Ala Arg Ile Asp Gly Glu Val Cys Asp Leu Ser Asp Pro Pro Lys Leu 185 Glu Leu Gln Lys Lys His Thr Ile Glu Val Val Ile Asp Arg Phe Lys

200 205 Val Arg Glu Asp Leu Ala Thr Arg Leu Ala Glu Ser Phe Glu Thr Ala 215 220 Leu Glu Leu Ser Gly Gly Thr Ala Val Val Ser Asp Met Asp Asp Ala 230 235 Lys Ala Glu Glu Leu Phe Ser Ala Asn Phe Ala Cys Pro Ile Cys 245 250 Gly Tyr Ser Met Arg Glu Leu Glu Pro Arg Leu Phe Ser Phe Asn Asn 265 260 Pro Ala Gly Ala Cys Pro Thr Cys Asp Gly Leu Gly Val Gln Gln Tyr 280 285 275 Phe Asp Pro Asp Arg Val Ile Gln Asn Pro Glu Leu Ser Leu Ala Gly 295 300 Gly Ala Ile Arg Gly Trp Asp Lys Arg Asn Phe Tyr Tyr Phe Gln Met 310 315 Leu Lys Ser Leu Ala Glu His Tyr Lys Phe Asp Val Glu Ala Pro Trp 325 330 Ala Ser Leu Ser Ala Asn Val His Lys Val Ile Leu Phe Gly Ser Gly 340 345 Lys Glu Asn Ile Glu Phe Lys Tyr Met Asn Asp Arg Gly Asp Thr Ser 360 365 Val Arg Arg His Pro Phe Glu Gly Val Leu His Asn Met Glu Arg Arg 375 Tyr Lys Glu Thr Glu Ser Ser Ala Val Arg Glu Glu Leu Ala Lys Phe 390 395 Ile Ser Asn Arg Ser Cys Ala Thr Cys Glu Gly Thr Arg Leu Arg Arg 410 Glu Ala Arg His Val Phe Val Glu Asn Thr Ala Leu Pro Thr Ile Ser 420 425 Asp Met Ser Ile Gly His Ala Met Asp Phe Phe Asn Asn Leu Lys Leu 440 Ser Gly Gln Arg Ala Lys Ile Ala Glu Lys Val Leu Lys Glu Ile Gly 455 460 Asp Arg Leu Lys Phe Leu Val Asn Val Gly Leu Asn Tyr Leu Thr Leu 470 475 Ser Arg Ser Ala Glu Thr Leu Ser Gly Glu Ala Gln Arg Ile Arg 490 485 Leu Ala Ser Gln Ile Gly Ala Gly Leu Val Gly Val Met Tyr Val Leu . 505 510 Asp Glu Pro Ser Ile Gly Leu His Gln Arg Asp Asn Glu Arg Leu Leu 515 520 525 Gly Thr Leu Val His Leu Arg Asn Leu Gly Asn Thr Val Ile Val Val 535 540 Glu His Asp Glu Asp Ala Ile Arg Ala Ala Asp His Val Ile Asp Ile 550 555 Gly Pro Gly Ala Gly Val His Gly Gly Gln Val Val Ala Glu Gly Thr 565 570 Leu Lys Asp Ile Met Ala Val Pro Glu Ser Leu Thr Gly Gln Tyr Met 580 585 Ser Gly Lys Arg Lys Ile Glu Val Pro Lys Gln Arg Val Ala Ala Asn 600 605 Pro Glu Lys Val Leu Lys Leu Thr Gly Ala Arg Gly Asn Asn Leu Lys 615 620 Asp Val Thr Leu Thr Leu Pro Val Gly Leu Phe Thr Cys Ile Thr Gly 630 635 Val Ser Gly Ser Gly Lys Ser Thr Leu Ile Asn Asp Thr Leu Phe Pro 645 650 Ile Ala Gln Thr Ala Leu Asn Gly Ala Thr Leu Ala Glu Pro Ala Pro 665 Tyr Arg Asp Ile Gln Gly Leu Glu His Phe Asp Lys Val Ile Asp Ile 680

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Asp Gln Ser Pro Ile Gly Arg Thr Pro Arg Ser Asn Pro Ala Thr Tyr
                        695
                                             700
Thr Gly Val Phe Thr Pro Val Arg Glu Leu Phe Ala Gly Val Pro Glu
                    710
                                        715
Ala Arg Ser Arg Gly Tyr Thr Pro Gly Arg Phe Ser Phe Asn Val Arg
                                    730
                725
Gly Gly Arg Cys Glu Ala Cys Gln Gly Asp Gly Val Ile Lys Val Glu
            740
                                745
Met His Phe Leu Pro Asp Ile Tyr Val Pro Cys Asp Gln Cys Lys Gly
                            760
                                                 765
Lys Arg Tyr Asn Arg Glu Thr Leu Glu Ile Lys Tyr Lys Gly Lys Thr
                        775
                                             780
Ile His Glu Val Leu Asp Met Thr Ile Glu Glu Ala Arg Glu Phe Phe
                    790
                                         795
Asp Ala Val Pro Ala Leu Ala Arg Lys Leu Gln Thr Leu Met Asp Val
                                    810
                805
                                                         815
Gly Leu Thr Tyr Ile Arg Leu Gly Gln Ser Ala Thr Thr Leu Ser Gly
            820
                                825
Gly Glu Ala Gln Arg Val Lys Leu Ala Arg Glu Leu Ser Lys Arg Gly
                            840
Thr Gly Gln Thr Leu Tyr Ile Leu Asp Glu Pro Thr Thr Gly Leu His
                        855
                                             860
Phe Ala Asp Ile Gln Gln Leu Leu Asp Val Leu His Gln Leu Arg Asp
                    870
                                         875
Gln Gly Asn Thr Ile Val Val Ile Glu His Asn Leu Asp Val Ile Lys
                                    890
Thr Ala Asp Trp Ile Val Asp Leu Gly Pro Glu Gly Gly Ser Gly Gly
            900
                                905
Gly Glu Ile Leu Val Ser Gly Thr Pro Glu Thr Val Ala Glu Cys Glu
                            920
Ala Ser His Thr Ala Arg Phe Leu Lys Pro Leu Leu
    930
                        935
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<211> 101
<212> PRT
<213> Enterobacter cloacae
<400> 9515
Arg Phe Arg Asp Gly Phe Gly Phe Gly Leu Ala Thr Ser Gly His Glu
                                    10
Val Asn Ala Val Ala Ala Leu Tyr Val His Gly Asp Gln Arg Ala Gly
                                25
Asn Leu Phe Arg Asp Thr Glu Leu Ile Pro Ala Val Val His Leu Phe
                            40
Pro Glu Phe Arg Val Phe Gln Ile Gly Phe Ala Val Arg Gly Val Arg
                        55
Phe Phe Ala Ala Pro Glu Thr Gly Ala Gly Glu Asn Gly Ile Val
                    70
                                        75
Asn Ile Glu Ala His Gly His Arg Arg Ala Thr Arg Gln Ala Val Phe
                                    90
Asn Leu Cys His
            100
<210> 9516
<211> 370
<212> PRT
<213> Enterobacter cloacae
<400> 9516
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Pro Gly Asp Leu Ile Ile Thr Leu Thr Arg Phe Ser Leu Phe Val Glu

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Gly Phe Val Ser Cys His Ser Glu Trp Ser Tyr Arg Asp Lys Glu Trp
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Val Glu Arg Leu Pro His Ser Gly Gly Ser Met Ala Thr Arg Ile Glu
Phe His Lys His Gly Gly Pro Asp Val Leu Lys Ala Val Glu Phe Thr
Pro Ala Ala Pro Gly Glu Asn Glu Ile Gln Val Glu Asn Lys Ala Ile
                    70
                                         7.5
Gly Ile Asn Tyr Ile Asp Thr Tyr Ile Arg Gly Gly Leu Tyr Pro Pro
                                     90
Pro Ser Met Pro Ser Gly Leu Gly Thr Glu Ala Ala Gly Ile Val Ser
                                105
Lys Val Gly Ser Ala Val Lys His Ile Lys Glu Gly Asp Arg Val Val
        115
                            120
                                                 125
Tyr Ala Gln Ser Ala Leu Gly Ala Tyr Ser Ser Ile His Asn Val Pro
                        135
Ala Glu Lys Ala Ala Leu Leu Pro Asn Ala Ile Gly Phe Glu Gln Ala
                    150
                                         155
Ala Ala Ser Phe Leu Lys Gly Leu Thr Val Tyr Tyr Leu Leu Arg Lys
                                     170
Thr Tyr Glu Ile Lys Pro Asp Glu Gln Phe Leu Phe His Ala Ala Ala
Gly Gly Val Gly Leu Ile Ala Cys Gln Trp Ala Lys Ala Leu Gly Ala
                            200
Lys Leu Ile Gly Thr Thr Gly Ser Ala Gln Lys Ala Gln Arg Ala Leu
                        215
Asp Ala Gly Ala Trp Gln Val Ile Asn Tyr Arg Glu Glu Ser Ile Val
                    230
                                         235
Glu Arg Leu Lys Glu Ile Thr Gly Gly Lys Lys Val Arg Val Val Tyr
                245
                                     250
Asp Ser Val Gly Lys Asp Thr Trp Glu Ser Ser Leu Asp Cys Leu Gln
                                265
                                                     270
Arg Arg Gly Leu Met Val Ser Phe Gly Asn Ala Ser Gly Ala Val Thr
                            280
Gly Val Asn Leu Gly Ile Leu Asn Gln Lys Gly Ser Leu Tyr Val Thr
                        295
                                             300
Arg Pro Ser Leu Gln Gly Tyr Ile Thr Asn Arg Glu Glu Leu Glu Glu
                    310
                                         315
Ala Ser Asn Glu Leu Phe Ser Leu Ile Ala Ser Gly Val Ile Lys Val
                325
                                    330
Asp Val Ala Glu Ala Gln Lys Tyr Pro Leu Thr Asp Ala Gln Arg Ala
                                345
His Glu Val Leu Glu Ser Arg Ala Thr Gln Gly Ser Ser Leu Leu Ile
                            360
Pro
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<210> 9517
<211> 834
<212> PRT
<213> Enterobacter cloacae
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Ile Ala Leu Leu Thr Arg Gly Phe Thr Ser Phe Met Ser Gly Trp Pro
Arg Ile Tyr Tyr Lys Leu Leu Asn Leu Pro Leu Ser Val Leu Val Lys
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Ser Lys Ser Ile Pro Ala Glu Pro Ala Leu Glu Leu Gly Leu Asp Thr

55 Ser Arg Pro Ile Met Tyr Val Leu Pro Tyr Asn Ser Lys Ala Asp Leu 70 75 Leu Thr Leu Arg Ala Gln Cys Leu Ala His Asp Leu Pro Asp Pro Leu 85 90 Glu Pro Leu Glu Val Asp Gly Thr Leu Leu Pro Arg Tyr Val Phe Ile 100 105 His Gly Gly Pro Arg Val Phe Thr Tyr Tyr Thr Pro Lys Glu Glu Ser 120 125 Ile Lys Leu Phe His Asp Tyr Leu Asp Leu His Arg Ser Asn Pro Asp 135 140 130 Leu Asp Val Gln Met Val Pro Val Ser Val Met Phe Gly Arg Arg Pro 150 155 Gly Arg Glu Lys Gly Glu Glu Asn Pro Pro Leu Arg Met Leu Asn Gly 165 170 Ile Gln Lys Phe Phe Ala Val Ser Trp Leu Gly Arg Asp Ser Phe Val 180 185 Arg Phe Ser Pro Ser Val Ser Leu Arg Arg Met Ala Asp Glu His Gly 200 Thr Asp Lys Ile Ile Ala Gln Lys Leu Ala Arg Val Ala Arg Met His 215 Phe Ala Arg Gln Arg Leu Ala Ala Val Gly Pro Arg Leu Pro Ala Arg 230 235 Gln Asp Leu Phe Asn Lys Leu Leu Ala Ser Lys Ala Ile Ala Arg Ala 245 250 Val Glu Asp Glu Ala Arg Ser Lys Lys Ile Ser His Glu Lys Ala Gln 265 270 Gln Asn Ala Ile Ala Leu Met Glu Glu Ile Ala Ala Asn Phe Ser Tyr 280 Glu Met Ile Arg Leu Ser Asp Arg Ile Leu Gly Phe Thr Trp Asn Arg 295 Leu Tyr Gln Gly Ile Asn Val His Asn Ala Glu Arg Val Arg Gln Leu 310 315 Ala His Asp Gly His Glu Ile Val Tyr Val Pro Cys His Arg Ser His 325 330 Met Asp Tyr Leu Leu Ser Tyr Val Leu Tyr His Gln Gly Leu Val 340 345 Pro Pro His Ile Ala Ala Gly Ile Asn Leu Asn Phe Trp Pro Ala Gly 360 365 Pro Ile Phe Arg Arg Leu Gly Ala Phe Phe Ile Arg Arg Thr Phe Lys 375 380 Gly Asn Lys Leu Tyr Ser Thr Val Phe Arg Glu Tyr Leu Gly Glu Leu 390 395 Phe Ser Arg Gly Tyr Ser Val Glu Tyr Phe Val Glu Gly Gly Arg Ser 405 410 Arg Thr Gly Arg Leu Leu Asp Pro Lys Thr Gly Thr Leu Ser Met Thr 420 425 430 Ile Gln Ala Met Leu Arg Gly Gly Thr Arg Pro Ile Thr Leu Val Pro 440 Ile Tyr Ile Gly Tyr Glu His Val Met Glu Val Gly Thr Tyr Ala Lys 455 460 Glu Leu Arg Gly Ala Thr Lys Glu Lys Glu Ser Leu Pro Gln Met Leu 470 475 Arg Gly Leu Ser Lys Leu Arg Asn Leu Gly Gln Gly Tyr Val Asn Phe 485 490 Gly Glu Pro Leu Pro Leu Met Thr Tyr Leu Asn His His Val Pro Glu 505 Trp Arg Glu Ser Ile Asp Pro Ile Glu Ala Val Arg Pro Ala Trp Leu 520 525 Thr Pro Thr Val Asn Gly Ile Ala Ser Glu Leu Met Val Arg Ile Asn 535

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Asn Ala Gly Ala Ala Asn Ala Met Asn Leu Cys Cys Thr Ala Leu Leu
                    550
                                        555
Ala Ser Arg Gln Arg Ser Leu Thr Arg Glu Gln Leu Thr Glu Gln Ile
                565
                                    570
Asp Cys Tyr Leu Asp Ile Met Arg Asn Val Pro Tyr Ser Val Asp Ser
                                585
Thr Val Pro Ser Ala Thr Ala Ser Glu Leu Ile Asp His Ala Leu Gln
                            600
Met Asn Lys Phe Glu Val Glu Lys Asp Thr Ile Gly Asp Ile Ile Ile
                        615
                                            620
Leu Pro Arg Glu Gln Ala Val Leu Met Thr Tyr Tyr Arg Asn Asn Ile
                    630
                                        635
Thr His Met Leu Met Leu Pro Ser Leu Met Ala Ala Ile Ile Thr Gln
                645
                                    650
His Arg Arg Ile Ser Arg Gln Glu Leu Leu Arg His Ile Gln Ala Ile
            660
                                665
Tyr Pro Met Leu Lys Ala Glu Leu Phe Leu Arg Trp Ser Lys Asp Glu
        675
                            680
Leu Ala Ala Glu Leu Asp Lys Met Thr Ala Glu Met His Arg Gln Gly
                        695
                                            700
Leu Ile Thr Ile Ser Asp Asp Glu Leu His Ile Asn Pro Ser Arg Ser
                    710
                                        715
Arg Thr Leu Gln Leu Leu Ala Ser Gly Ala Arg Glu Thr Leu Gln Arg
                725
                                    730
Tyr Ala Ile Thr Phe Trp Leu Leu Ser Ala Asn Pro Ser Ile Asn Arg
            740
                                745
Gly Thr Leu Glu Lys Glu Ser Arg Thr Leu Ala Gln Arg Leu Ser Val
                            760
                                                765
Leu His Gly Ile Asn Ala Pro Glu Phe Phe Asp Lys Ala Val Phe Ser
                        775
                                            780
Ser Leu Val Leu Thr Leu Arg Asp Glu Gly Tyr Ile Ser Asp Thr Gly
                    790
                                        795
Asp Ala Glu Pro Glu Glu Thr Met Lys Val Tyr Gln Met Leu Ala Glu
                                    810
Leu Ile Thr Ala Asp Val Arg Leu Thr Ile Glu Ser Ser Thr Gln Gly
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Glu
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<210> 9518 <211> 519 <212> PRT

<213> Enterobacter cloacae

<400> 9518

 Arg
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 Met
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 Val
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 His
 Trp
 Trp
 Gln
 Ser

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 Leu
 Lys
 Trp
 Ser
 Val
 Ile
 Gly
 Leu
 Leu
 Cys
 Leu
 Leu
 Val
 Gly

 Tyr
 Leu
 Val
 Leu
 Met
 Tyr
 Val
 Gly
 Gly
 Glu
 Tyr
 Leu
 Phe
 Ala
 Ile

 Met
 Thr
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 Met
 Gly
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Tyr Pro Ala Gly Asp Glu Trp Lys Leu Ala Leu Thr Asp Gly Glu Ser
                        135
                                            140
Gly Lys Thr Tyr Leu Ser Asp Ala Phe Lys Phe Gly Glu Gln Lys
                    150
                                        155
Leu Thr Leu Lys Glu Ala Ala Ala Leu Pro Glu Gly Glu Arg Ala Asn
                                    170
Leu Arg Ile Ile Thr Gln Asn Arg Gln Ala Leu Thr Gln Leu Thr Ala
                                185
Val Leu Pro Asp Glu Ser Lys Val Ile Met Ser Ser Leu Arg Gln Phe
                            200
Ser Gly Thr Gln Pro Leu Tyr Thr Leu Ala Asp Asp Gly Thr Leu Thr
                        215
                                            220
Asn Asn Gln Ser Gly Val Lys Tyr Arg Pro Asn Asn Asp Ile Gly Phe
                    230
                                        235
Tyr Gln Ser Val Asn Ala Asp Gly Ser Trp Gly Asp Asp Lys Leu Ser
                                    250
                245
Pro Gly Tyr Thr Val Thr Ile Gly Trp Asp Asn Phe Thr Arg Val Phe
            260
                                265
                                                    270
Thr Asp Glu Gly Ile Gln Lys Pro Phe Phe Ala Ile Phe Val Trp Thr
        275
                            280
Val Val Phe Ser Val Leu Thr Val Ile Leu Thr Val Ala Val Gly Met
                                            300
                        295
Val Leu Ala Cys Leu Val Gln Trp Glu Ser Leu Lys Gly Lys Ala Ile
                    310
                                        315
Tyr Arg Val Leu Leu Ile Leu Pro Tyr Ala Val Pro Ser Phe Ile Ser
                325
                                    330
Ile Leu Ile Phe Lys Gly Leu Phe Asn Gln Ser Phe Gly Glu Ile Asn
            340
                                345
Met Met Leu Ser Ala Leu Phe Gly Ile Lys Pro Ala Trp Phe Ser Asp
                            360
Pro Thr Thr Ala Arg Ser Met Ile Ile Ile Val Asn Thr Trp Leu Gly
                        375
Tyr Pro Tyr Met Met Ile Leu Cys Met Gly Leu Leu Lys Ala Ile Pro
                    390
                                        395
Asp Asp Leu Tyr Glu Ala Ser Ala Met Asp Gly Ala Gly Pro Phe Gln
                405
                                    410
Asn Phe Phe Lys Ile Thr Leu Pro Leu Leu Ile Lys Pro Leu Thr Pro
                                425
            420
Leu Met Ile Ala Ser Phe Ala Phe Asn Phe Asn Phe Val Leu Ile
                            440
Gln Leu Leu Thr Asn Gly Gly Pro Asp Arg Leu Gly Thr Thr Thr Pro
                        455
                                            460
Ala Gly Tyr Thr Asp Leu Leu Val Ser Tyr Thr Tyr Arg Ile Ala Phe
                    470
                                        475
Glu Gly Gly Gly Gln Asp Phe Gly Leu Ala Ala Ile Ala Thr
                                    490
Leu Ile Phe Leu Leu Val Gly Ala Leu Ala Ile Val Asn Leu Lys Ala
            500
                                505
Thr Arg Met Lys Phe Asp
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<210> 9519
<211> 184
<212> PRT
<213> Enterobacter cloacae
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<400> 9519

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His His Ser Cys Lys Arg Leu Arg His Ala Leu Asp Val Ala Gly Ile
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Gln Thr Arg His Ala His Thr Ala Ala Gly Asp Gln Val Asp Thr Glu
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Leu Phe Thr Gln Ala Ile Asp Leu Arg Cys Ala Gln Ser Gly Val Ala
                    70
                                        75
Glu His Pro Ala Leu Leu Glu Lys Ile Ile Lys Val Met Pro Arg His
                                    90
Gly Leu Phe Gln Asp Val Asn Gln Leu Leu Thr His Arg Gln Asp Ala
            100
                                105
Leu Thr His Arg Phe His Phe Arg Lys Pro Gly Gly Phe Gln Ser Phe
                            120
Val Thr Glu Asn Cys Arg His His Leu Arg Thr Lys Val Arg Arg Ala
   130
                        135
                                            140
Gly Val Asp Thr Ala Asp Arg Arg Phe Gln Leu Ala Glu Tyr Ala Ser
                    150
                                        155
Arg Gly Phe Gly Val Phe Thr His His Gly Gln Thr Ala Asn Ala Leu
                165
                                    170
Ala Val Gln Gly Glu Asp Phe
            180
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<210> 9520 <211> 174

<212> PRT

<213> Enterobacter cloacae

<400> 9520

Glu Gly Val Ala Asp Gln Ser Gly Lys Pro Arg Ala Gly Asn Arg Ala 10 Asn Gly Val Gly Val Phe Phe His Ala Arg Ala Lys Ala Leu Ile Gly 20 Asp Val Glu Glu Arg Asp Gln Val Thr Arg Leu Gln Tyr Leu Asp His Arg Ile Pro Leu Gly Ile Gly Glu Val Arg Thr Arg Arg Val Met Ala Ala Arg Met Gln Gln Tyr Asp Ala Ala Leu Arg Gln Gly Val Gln Phe 70 Phe Gln Gln Arg Ile Asn Ala His Ala Val Arg Phe Ala Val Glu Pro Arg Ile Ser Phe Asn Leu Lys Ala Arg Ala Leu Glu Asp Arg Asn Val 105 Val Phe Pro Arg Arg Val Ala Asp Pro His Ala Gly Ile Arg Glu Val 120 Leu Phe Gln Glu Ile Cys Ala Tyr Leu Gln Arg Thr Arg Ala Thr Gln 140 135 Arg Leu Asp Ser Arg Tyr Ala Leu Leu Arg Glu His Arg Val Val Arg 150 155 Thr Lys Gln Gln Arg Arg Asp Ser Val Ala Val Gly Val

<210> 9521

<211> 184

<212> PRT

<213> Enterobacter cloacae

165

<400> 9521

Ser Glu Ser Phe His Pro Leu Pro His Pro Arg Cys Pro Met Asp Lys 1 5 10 15 Ser Thr Lys Glu Leu Leu Ala Gln Ala Glu Lys Leu Cys Ala Gln Arg 20 25 30 Asn Val Arg Leu Thr Pro Gln Arg Leu Glu Val Leu Arg Leu Met Ser

40 Leu Gln Gln Gly Ala Ile Ser Ala Tyr Asp Leu Leu Asp Leu Leu Arg 55 60 Glu Ser Glu Pro Gln Ala Lys Pro Pro Thr Val Tyr Arg Ala Leu Asp 70 75 Phe Leu Leu Glu Gln Gly Phe Val His Lys Val Glu Ser Thr Asn Ser 90 Tyr Val Leu Cys His Leu Phe Asp Gln Pro Thr His Thr Ser Ala Met 105 Phe Ile Cys Asp Arg Cys Gly Val Val Lys Glu Glu Cys Ala Glu Gly 120 125 115 Val Glu Asp Ile Met His Thr Leu Ala Ala Arg Met Gly Phe Ala Leu 135 Arg His Asn Val Ile Glu Ala His Gly Leu Cys Ser Ala Cys Val Glu 150 155 Val Glu Ser Cys Arg His Gln Asp Asp Cys Gln His Asp His Ser Ile 165 170 Leu Val Lys Lys Pro Arg 180

<210> 9522 <211> 72 <212> PRT

<213> Enterobacter cloacae

<400> 9522

 Ser Gly Ser Gly Thr Thr Thr Ser Ser Ala Leu Lys Pro Lys Arg Phe

 1
 5
 10
 15

 .Cys Arg Thr Thr Ser Thr Cys Thr Ala Leu Arg Pro Thr Ser Ser Arg
 20
 25
 30

 Ala Thr Trp Asn Pro Thr Ala Ser Thr Leu Thr Val Thr Ala Thr Arg
 45

 Trp Ile Thr Arg Leu Ala Gln Ser Ser Gly Ala Ser Arg Ala Pro Thr
 50
 55

Val Ser Thr Arg Ser Thr Ser 65 70

<210> 9523 <211> 713 <212> PRT

<213> Enterobacter cloacae

<400> 9523

Cys Arg Tyr Pro Ser Leu Pro Asp Thr Ala Asp Thr Gly Ile Met Lys 10 Lys Thr Tyr Leu Tyr Ser Met Leu Ala Leu Cys Val Ser Ala Ala Cys 20 25 His Ala Glu Thr Tyr Pro Ala Pro Ile Gly Pro Ser Gln Ser Asp Phe 40 45 Gly Gly Val Gly Leu Leu Gln Thr Pro Thr Ala Arg Met Ala Arg Glu 55 Gly Glu Ile Ser Leu Asn Tyr Arg Asp Asn Asp Gln Tyr Arg Tyr Tyr 70 75 Ser Ala Ser Val Gln Leu Phe Pro Trp Leu Glu Thr Thr Leu Arg Tyr 90 Thr Asp Val Arg Thr Lys Gln Tyr Ser Ser Val Asp Ala Phe Ser Gly 105 Asp Gln Thr Tyr Lys Asp Lys Ala Phe Asp Val Lys Leu Arg Leu Trp 120 Glu Glu Ser Tyr Trp Met Pro Gln Val Ser Val Gly Ala Lys Asp Ile 135

Gly Gly Thr Gly Leu Phe Asp Ala Glu Tyr Ile Val Ala Ser Lys Ala 150 155 Trp Gly Pro Phe Asp Phe Ser Leu Gly Leu Gly Trp Gly Tyr Leu Gly 170 Thr Ser Gly Asn Val Lys Asn Pro Phe Cys Ser Tyr Ser Asp Lys Tyr 185 Cys Tyr Arg Asp Asn Ser Tyr Gln Lys Ala Gly Ser Ile Asn Gly Asp 200 Gln Met Phe His Gly Pro Ala Ser Leu Phe Gly Gly Val Glu Tyr Gln 215 220 Thr Pro Trp Gln Pro Leu Arg Leu Lys Leu Glu Tyr Glu Gly Asn Asn 230 235 Tyr Ser Glu Asp Phe Ala Gly Lys Ile Glu Gln Lys Ser Lys Phe Asn 250 245 Val Gly Ala Ile Tyr Arg Val Thr Asp Trp Ala Asp Val Asn Leu Ser 260 265 Tyr Glu Arg Gly Asn Thr Leu Met Phe Gly Phe Thr Leu Arg Thr Asn 275 280 Phe Asn Asp Met Arg Pro His Tyr Asn Asp Asn Pro Arg Pro Lys Tyr 295 300 Gln Pro Glu Pro Gln Asp Ala Ile Ile Gln His Ser Val Val Ala Asn 310 315 Gln Leu Thr Leu Leu Lys Tyr Asn Ala Gly Leu Ala Asp Pro Lys Ile 330 Gln Thr Lys Gly Asp Thr Leu Tyr Val Thr Gly Glu Gln Val Lys Tyr 345 Arg Asp Ser Arg Glu Gly Ile Glu Arg Ala Asn Arg Ile Val Met Asn 360 Asp Leu Pro Glu Gly Ile Arg Thr Ile Arg Val Thr Glu Asn Arg Leu 375 380 Asn Leu Pro Gln Val Thr Thr Glu Thr Asp Val Ala Ser Leu Lys Arg 390 395 His Leu Glu Gly Glu Pro Leu Gly His Glu Thr Glu Leu Val Gln Lys 405 410 Arg Val Glu Pro Val Val Pro Glu Thr Thr Glu Gln Gly Trp Tyr Ile 420 425 Asp Lys Ser Arg Phe Asp Phe His Ile Asp Pro Val Leu Asn Gln Ser 440 Val Gly Gly Pro Glu Asn Phe Tyr Met Tyr Gln Leu Gly Ala Met Ala 455 460 Thr Ala Asp Leu Trp Val Thr Asp His Leu Leu Thr Thr Gly Ser Leu 470 475 Phe Gly Asn Ile Thr Asn Asn Tyr Asp Lys Phe Lys Tyr Thr Asn Pro 485 490 Pro Asn Asp Ser Lys Leu Pro Arg Val Arg Thr Arg Val Arg Glu Tyr 505 Val Gln Asn Asp Ile Tyr Val Asn Asn Leu Gln Ala Asn Tyr Phe Gln 520 525 Tyr Phe Gly Asn Gly Phe Tyr Gly Gln Val Tyr Gly Gly Tyr Leu Glu 535 540 Thr Met Phe Gly Gly Ala Gly Ala Glu Val Leu Tyr Arg Pro Val Asp 550 555 Ser Asn Trp Ala Phe Gly Val Asp Ala Asn Tyr Val Lys Gln Arg Asp 570 Trp Arg Ser Ala Gln Asp Met Met Lys Phe Thr Asp Tyr Ser Val Lys 585 Thr Gly His Leu Thr Ala Tyr Trp Thr Pro Ser Phe Ala Gln Asp Val 600 Leu Val Lys Ala Ser Val Gly Gln Tyr Leu Ala Gly Asp Lys Gly Gly 615 Thr Leu Asp Ile Ser Lys His Phe Asp Ser Gly Val Val Val Gly Gly

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630
                                       635
Tyr Ala Thr Ile Thr Asn Val Ser Pro Asp Glu Tyr Gly Glu Gly Asp
                                    650
Phe Thr Lys Gly Val Tyr Val Ser Ile Pro Leu Asp Leu Phe Ser Ser
            660
                                665
Gly Pro Thr Arg Ser Arg Ala Ala Val Gly Trp Thr Pro Leu Thr Arg
                            680
                                                685
Asp Gly Gly Gln Gln Leu Gly Arg Lys Phe Gln Leu Tyr Asp Met Thr
                        695
Ser Asp Lys Asn Ile Asn Phe Arg
705
<210> 9524
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 9524
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Arg Cys Cys Met Thr Ser Leu Thr Arg Pro Arg Val Glu Phe Ile Ser
Thr Ile Leu Gln Thr Val Leu Asn Leu Gly Leu Leu Ser Leu Gly Leu
Ile Leu Val Val Phe Leu Gly Lys Glu Thr Val His Leu Ala Asp Val
Leu Phe Ala Pro Glu Gln Thr Ser Lys Tyr Ala Leu Val Glu Gly Leu
Val Val Tyr Phe Leu Tyr Phe Glu Phe Ile Ala Leu Ile Val Lys Tyr
Phe Gln Ser Gly Phe His Phe Pro Leu Arg Tyr Phe Val Tyr Ile Gly
            100
                                105
                                                    110
Ile Thr Ala Ile Val Arg Leu Ile Ile Val Asp His Lys Ser Pro Leu
                            120
       115
                                                125
Asp Val Leu Ile Tyr Ser Ala Ala Ile Leu Leu Leu Val Ile Thr Leu
                        135
Trp Leu Cys Asn Ser Lys Arg Leu Lys Arg Glu
                    150
<210> 9525
<211> 190
<212> PRT
<213> Enterobacter cloacae
<400> 9525
Ile Leu Phe Val Arg Pro His Phe Val Asn Leu Arg Tyr Asn Ala Phe
                                    10
Thr Leu Cys Ile Gly Glu Ser Gly Met Ser His Pro Ala Leu Thr Gln
                                25
Leu Arg Ala Leu Arg Tyr Phe Asp His Ile Pro Ala Leu Asp Pro Glu
                            40
Gln Leu Asp Trp Leu Leu Glu Asp Ser Met Thr Lys Arg Phe Glu
Gln Gln Gly Lys Thr Val Thr Val Thr Met Ile Gln Glu Gly Phe Val
Ser Pro Ala Glu Ile Ala Ser Glu Leu Pro Leu Pro Gln Glu Glu
Arg Tyr Trp Leu Arg Glu Ile Leu Leu Cys Ala Asp Gly Glu Pro Trp
                               105
Leu Ala Gly Arg Thr Val Val Pro Glu Ser Thr Leu Ser Gly Pro Glu
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120

<400> 9527

Leu Ala Leu Gln Arg Leu Gly Lys Thr Pro Leu Gly Arg Tyr Leu Phe 135 Thr Ser Ser Glu Leu Thr Arg Asp Phe Ile Glu Ile Gly Cys Asp Ala 150 155 Asp Leu Trp Gly Arg Arg Ser Arg Leu Arg Leu Ser Gly Lys Pro Leu 165 170 Ile Leu Thr Glu Leu Phe Leu Pro Ala Ser Pro Leu Tyr 185 <210> 9526 <211> 294 <212> PRT <213> Enterobacter cloacae <400> 9526 Glu Gly Glu Lys Met Glu Trp Ser Leu Thr Gln Asn Lys Leu Leu Ala 10 Tyr His Arg Leu Met Arg Thr Asp Lys Pro Ile Gly Ala Leu Leu Leu 25 Leu Trp Pro Thr Leu Trp Ala Leu Trp Val Ala Thr Pro Gly Val Pro Pro Leu Trp Ile Leu Ala Val Phe Val Ala Gly Val Trp Leu Met Arg Ala Ala Gly Cys Val Val Asn Asp Tyr Ala Asp Arg Lys Phe Asp Gly 70 75 His Val Lys Arg Thr Ala Asn Arg Pro Leu Pro Ser Gly Gln Val Thr 90 Gly Lys Glu Ala Arg Ile Leu Phe Val Val Leu Val Leu Leu Ser Phe 100 105 Met Leu Val Leu Thr Leu Asn Thr Met Thr Ile Leu Leu Ser Val Ala 120 Ala Leu Ala Trp Val Tyr Pro Phe Met Lys Arg Tyr Thr His 135 140 Leu Pro Gln Val Val Leu Gly Ala Ala Phe Gly Trp Ser Ile Pro Met 150 155 Ala Phe Ala Ala Val Ser Glu Ser Val Pro Leu Ser Cys Trp Leu Met 170 165 Phe Leu Ala Asn Ile Leu Trp Ala Val Ala Tyr Asp Thr Gln Tyr Ala 180 185 190 Met Val Asp Arg Asp Asp Leu Lys Ile Gly Ile Lys Ser Thr Ala 195 200 205 Ile Leu Phe Gly Arg His Asp Lys Leu Ile Ile Gly Ile Leu Gln Val 215 220 Ala Val Leu Ala Leu Met Val Ala Ile Gly Arg Leu Asn Gly Leu Asn 235 230 Trp Glu Phe Tyr Trp Ser Val Leu Val Ala Gly Leu Leu Phe Ala Tyr 245 250 Gln Gln Lys Leu Ile Ala Lys Arg Glu Arg Glu Ala Cys Phe Lys Ala 260 265 Phe Leu Asn Asn Tyr Val Gly Leu Val Leu Phe Leu Gly Leu Ala 275 280 Met Ser Tyr Trp Ser 290 <210> 9527 <211> 127 <212> PRT <213> Enterobacter cloacae

Lys Val Leu Leu Met Ala Asn Asn Thr Thr Gly Leu Thr Arg Ile Ile

10 Lys Ala Ala Gly Tyr Ser Trp Lys Gly Phe Arg Ala Ala Trp Val Asn 25 Glu Ala Ala Phe Arg Gln Glu Ala Val Ala Ala Ile Val Ala Val Val 40 Ile Ala Cys Phe Leu Asp Val Asp Ala Ile Thr Arg Val Leu Leu Ile Gly Ser Val Phe Leu Val Met Ile Val Glu Ile Leu Asn Ser Ala Ile 75 Glu Ala Val Val Asp Arg Ile Gly Ser Glu Phe His Glu Leu Ser Gly 90 85 Arg Ala Lys Asp Met Gly Ser Ala Ala Val Leu Leu Ala Ile Ile Thr 105 100 Ala Ala Ile Thr Trp Val Thr Leu Leu Trp Ser His Phe Arg 120

<210> 9528 <211> 211

<212> PRT

<213> Enterobacter cloacae

<400> 9528

Leu Tyr Ile His Pro Gly Gly Gly Met Lys Ala Leu Thr Thr Arg Gln Gln Glu Val Phe Asp Leu Ile Arg Asp His Ile Gly Gln Thr Gly Met 25 Pro Pro Thr Arg Ala Glu Ile Ala Gln Arg Leu Gly Phe Arg Ser Pro Asn Ala Ala Glu Glu His Leu Lys Ala Leu Ala Arg Lys Gly Val Ile Glu Ile Val Ser Gly Ala Ser Arg Gly Ile Arg Leu Leu Val Glu Glu 70 Glu Ser Gly Ile Pro Leu Val Gly Arg Val Ala Ala Gly Glu Pro Leu Leu Ala Gln Gln His Ile Glu Gly His Tyr Gln Val Asp Pro Gly Met 105 Phe Lys Pro Ser Ala Asp Phe Leu Leu Arg Val Ser Gly Met Ser Met 120 125 Lys Asp Ile Gly Ile Leu Asp Gly Asp Leu Leu Ala Val His Lys Thr 135 140 Gln Asp Val Arg Asn Gly Gln Val Val Ala Arg Ile Asp Asp Glu 150 155 Val Thr Val Lys Arg Leu Lys Lys Gln Gly Asn Thr Val Gln Leu Leu 165 170

Pro Glu Asn Asn Glu Phe Ser Pro Ile Val Val Asp Leu Arg Glu Gln 185

Ser Phe Ser Ile Glu Gly Leu Ala Val Gly Val Ile Arg Asn Gly Glu 200

190

Trp Leu 210

<210> 9529

<211> 460

<212> PRT

<213> Enterobacter cloacae

<400> 9529

Phe Leu Tyr Ser Leu Ala Cys Phe Leu Ile Pro Val Ile Ser Met Ala Leu Leu Thr Ser Ala Asp Lys Ala Leu Trp Arg Leu Ala Leu Pro Met

```
Ile Phe Ser Asn Ile Thr Val Pro Leu Leu Gly Leu Val Asp Thr Ala
Val Ile Gly His Leu Asp Ser Pro Ile Tyr Leu Gly Gly Val Ala Ile
                        55
Gly Ala Thr Ala Thr Ser Phe Leu Ile Met Leu Leu Phe Leu Arg
                                        75
                    70
Met Ser Thr Thr Gly Leu Thr Ala Gln Ala Tyr Gly Ala Lys Asp Pro
                85
                                    90
Leu Arg Leu Ala Arg Ala Leu Val Gln Pro Leu Ile Leu Ala Phe Gly
            100
                                105
Ala Gly Ala Leu Ile Val Leu Leu Arg Thr Pro Leu Ile Asp Phe Ala
                            120
Leu His Ile Val Gly Gly Ser Asp Ala Val Leu Glu Gln Ala Arg Arg
                        135
                                            140
Phe Leu Glu Ile Arg Trp Leu Ser Ala Pro Ala Ser Leu Ala Asn Leu
                    150
                                        155
Val Leu Leu Gly Trp Leu Leu Gly Val Gln Tyr Ala Arg Ala Pro Val
                165
                                    170
Ile Leu Leu Val Val Gly Asn Leu Leu Asn Ile Met Leu Asp Leu Trp
                                185
Leu Val Met Gly Leu His Met Asn Val Arg Gly Ala Ala Leu Ala Thr
                            200
Ala Ile Ala Glu Tyr Gly Thr Leu Leu Ile Gly Leu Gly Met Val Trp
                        215
Arg Val Leu Ala Met Arg Gly Ile Thr Leu Asp Leu Leu Lys Ser Ala
                    230
                                        235
Trp Arg Gly Asn Ile Arg Lys Leu Leu Ala Leu Asn Arg Asp Ile Met
                245
                                    250
Leu Arg Ser Leu Leu Gln Leu Cys Phe Gly Ala Leu Thr Val Phe
                                265
Gly Ala Arg Leu Gly Pro Glu Ile Val Ala Val Asn Ala Val Leu Met
                            280
Thr Leu Leu Thr Phe Thr Ala Tyr Ala Leu Asp Gly Phe Ala Tyr Ala
                        295
                                            300
Val Glu Ala His Ser Gly Gln Ala Tyr Gly Ala Arg Glu Ser Gly Gln
                    310
                                        315
Leu Arg Glu Val Trp Arg Ala Ala Cys Arg Gln Ala Gly Leu Val Ala
               325
                                    330
Leu Ala Phe Ala Leu Val Tyr Ala Cys Phe Gly Gly His Ile Val Ala
                                345
Leu Leu Thr Ser Leu Pro Ala Leu Arg Glu Leu Ala Asp Arg Tyr Ile
                            360
Leu Trp Gln Val Val Leu Pro Val Val Gly Val Trp Cys Tyr Leu Leu
                        375
                                            380
Asp Gly Met Phe Ile Gly Ala Thr Arg Gly Ala Glu Met Arg Asn Ser
                    390
                                        395
Met Ala Val Ala Ala Ala Gly Phe Gly Leu Thr Leu Leu Thr Leu Pro
               405
                                    410
Tyr Leu Gly Asn His Gly Leu Trp Leu Ala Leu Ala Val Phe Leu Ser
           420
                                425
                                                    430
Leu Arg Gly Leu Ser Leu Ala Val Ile Trp His Arg His Trp Arg Asn
                           440
Asn Thr Trp Phe Pro Ala Pro His Asp Ile Ser
   450
                        455
```

<sup>&</sup>lt;210> 9530

<sup>&</sup>lt;211> 335

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
Asn Phe Ala Met Ser Ser Glu Phe Gln Thr Val Phe Pro Ala His Arg
                                    10
Phe Ser Ile Ala Pro Met Leu Asp Trp Thr Asp Arg His Cys Arg Tyr
                                25
Phe Leu Arg Gln Leu Ser Arg His Thr Leu Leu Tyr Thr Glu Met Val
Thr Thr Gly Ala Ile Ile His Gly Lys Gly Asp Tyr Leu Ala Tyr Ser
                        55
Glu Glu Glu His Pro Val Ala Leu Gln Leu Gly Gly Ser Asp Pro Ala
Ala Leu Ala Gln Cys Ala Lys Leu Ala Glu Glu Arg Gly Tyr Asp Glu
                85
                                    90
Ile Asn Leu Asn Val Gly Cys Pro Ser Asp Arg Val Gln Asn Gly Met
                                105
Phe Gly Ala Cys Leu Met Gly Asn Ala His Leu Val Ala Asp Cys Ile
                            120
Lys Ala Met Arg Asp Val Val Ser Ile Pro Val Thr Val Lys Thr Arg
                        135
Ile Gly Ile Asp Asp Gln Asp Ser Tyr Glu Phe Leu Cys Asp Phe Ile
                    150
                                        155
Asn Thr Val Ser Gly Lys Gly Glu Cys Glu Met Phe Ile Ile His Ala
               165
                                    170
Arg Lys Ala Trp Leu Ser Gly Leu Ser Pro Lys Glu Asn Arg Glu Ile
            180
                                185
Pro Pro Leu Asp Tyr Pro Arg Val Tyr Gln Leu Lys Arg Asp Phe Pro
       195
                            200
His Leu Thr Met Ser Ile Asn Gly Gly Ile Lys Ser Leu Asp Glu Ala
                        215
                                            220
Lys Ala His Leu Glu His Met Asp Gly Val Met Val Gly Arg Glu Ala
                    230
                                        235
Tyr Gln Asn Pro Gly Ile Leu Ala Thr Val Asp Arg Glu Ile Phe Gly
                245
                                    250
Val Glu Gly Ala Asp Thr Asp Pro Val Ala Val Arg Ala Met Tyr
                                265
Pro Tyr Ile Glu Arg Glu Leu Ser His Gly Thr Tyr Leu Gly His Ile
       275
                            280
Thr Arg His Met Leu Gly Leu Phe Gln Gly Ile Pro Gly Ala Arg Gln
                        295
                                            300
Trp Arg Arg Tyr Leu Ser Glu Asn Ala His Lys Ala Gly Ala Asp Ile
                   310
                                        315
Glu Val Leu Glu His Ala Leu Arg Leu Val Ala Asp Lys Arg
                325
                                    330
```

```
<210> 9531
```

## <400> 9531

Gly Ile Gln Met Gln Ala Ala Thr Val Val Ile Asn Arg Arg Ala Leu 1 5 10 15

Arg His Asn Leu Gln Arg Leu Arg Glu Leu Ala Pro Ala Ser Lys Leu 20 25 30

Val Ala Val Val Lys Ala Asn Ala Tyr Gly His Gly Leu Leu Glu Thr 35 40 45

Ala Arg Thr Leu Pro Asp Ala Asp Ala Phe Gly Val Ala Arg Leu Glu 50 55 60

Glu Ala Leu Arg Leu Arg Ala Gly Gly Ile Thr Gln Pro Ile Leu Leu 65 70 75 80

Leu Glu Gly Phe Phe Glu Ala Ser Asp Leu Pro Thr Ile Ala Asp Gln

<sup>&</sup>lt;211> 363

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
His Leu His Thr Ala Val His Asn Glu Glu Gln Leu Ala Ala Leu Glu
                                105
Thr Ala Glu Leu Ser Glu Pro Val Thr Val Trp Met Lys Leu Asp Thr
                            120
Gly Met His Arg Leu Gly Val Arg Pro Glu Ser Ala Glu Ala Phe Tyr
                        135
                                            140
Gln Arg Leu Cys Gln Cys Lys Asn Val Arg Gln Pro Val Asn Ile Val
                    150
                                        155
Ser His Phe Ala Arg Ala Asp Glu Pro Glu Cys Gly Ala Thr Glu Gln
                165
                                    170
Gln Leu Asp Ile Phe Asn Thr Phe Cys Glu Gly Lys Pro Gly Met Arg
            180
                                185
                                                    190
Ser Ile Ala Ala Ser Gly Gly Ile Leu Leu Trp Pro Gln Ser His Phe
                            200
Asp Trp Ala Arg Pro Gly Ile Ile Leu Tyr Gly Val Ser Pro Leu Glu
                        215
                                            220
Asn Lys Pro Trp Gly Pro Asp Phe Gly Phe Lys Pro Val Met Ser Leu
                    230
                                        235
Val Ser Lys Leu Ile Ala Val Arg Glu His Lys Ala Gly Glu Pro Val
                245
                                    250
Gly Tyr Gly Gly Thr Trp Ile Ser Glu Arg Asp Thr Arg Leu Gly Val
Val Ala Met Gly Tyr Gly Asp Gly Tyr Pro Arg Ala Ala Pro Thr Gly
                            280
Thr Pro Val Leu Val Asn Gly Arg Glu Val Lys Ile Val Gly Arg Val
                        295
Ala Met Asp Met Ile Cys Val Asp Leu Gly Pro Asp Ala Gln Asp Lys
                    310
                                        315
Ala Gly Asp Asp Ala Val Met Trp Gly Glu Gly Leu Pro Val Glu Arg
                325
                                    330
Ile Ala Glu Ile Thr Lys Val Ser Ala Tyr Glu Leu Ile Thr Arg Leu
                                345
Thr Ser Arg Val Ala Met Lys Tyr Val Asp
<210> 9532
```

<211> 149

<212> PRT

<213> Enterobacter cloacae

<400> 9532

Lys Asp Ser Pro Phe Ile Met Glu Gln His Met Trp Tyr Gln Gln Thr 10 Leu Thr Leu Ser Ala Lys Pro Arg Gly Phe His Leu Val Thr Asp Glu 25 Val Ile Gly Gln Ile Arg Asp Leu Ser Arg Val Lys Thr Gly Leu Leu 40 His Leu Leu Gln His Thr Ser Ala Ser Leu Thr Leu Asn Glu Asn 55 Cys Asp Pro Thr Val Arg Ser Asp Met Glu Arg His Phe Leu Lys Thr 70 75 Val Pro Asp Asn Ala Pro Tyr Glu His Asp Tyr Glu Gly Ala Asp Asp 85 90 Met Pro Ser His Ile Lys Ser Ser Leu Leu Gly Val Ser Leu Met Leu 105 Pro Val His Asn Gly Arg Leu Gln Leu Gly Thr Trp Gln Gly Ile Trp 120 Leu Gly Glu His Arg Ile His Gly Gly Ser Arg Lys Ile Ile Ala Thr Leu Gln Gly Glu

ded din diy d.

145

```
<210> 9533
<211> 75
<212> PRT
<213> Enterobacter cloacae
<400> 9533
Arg Arg Cys Pro Ser Ala Tyr Lys Val Ser Lys Ala Ser Glu Asp Leu
                                    10
Pro Asp Pro Glu Ser Pro Val Thr Thr Met Ser Leu Ser Arg Gly Ile
            20
                                25
Met Arg Leu Ile Phe Leu Arg Leu Trp Val Arg Ala Pro Arg Thr Ser
        35
Ile Leu Ser Ile His Leu Ser Arg Leu Glu His Gly Leu Pro Asp Leu
Phe Glu Gly Gln Thr Ala Val Arg Asn Gly
                    70
<210> 9534
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 9534
Arg Gly Phe Met Glu Lys Arg Leu Pro Arg Ile Lys Ala Leu Leu Thr
Pro Gly Glu Val Ala Lys Arg Ser Gly Val Ala Val Ser Ala Leu His
                                25
Phe Tyr Glu Ser Lys Gly Leu Ile Lys Ser Ile Arg Asn Ala Gly Asn
Gln Arg Arg Tyr Thr Arg Asp Val Leu Arg Tyr Val Ala Ile Ile Lys
                        55
Ile Ala Gln Arg Ile Gly Ile Pro Leu Ala Thr Ile Gly Asp Ala Phe
Gly Val Leu Pro Glu Gly His Ser Leu Ser Ala Lys Glu Trp Lys Gln
Leu Ser Ser Gln Trp Arg Glu Glu Leu Asp Arg Arg Ile His Thr Leu
                                105
Val Ala Leu Arg Asp Glu Leu Asp Gly Cys Ile Gly Cys Gly Cys Leu
                            120
                                                 125
Ser Arg Ser Asp Cys Pro Leu Arg Asn Pro Gly Asp Arg Leu Gly Glu
                        135
Gln Gly Thr Gly Ala Arg Leu Leu Glu Glu Asp
                    150
<210> 9535
<211> 598
<212> PRT
<213> Enterobacter cloacae
<400> 9535
Leu Phe Met Arg Lys Arg Val Ala Lys Ala Ala Arg Phe Tyr Phe Gln
Asp Ser Ser Cys Cys Leu Leu Arg Tyr Ser Gly Glu Asp Arg Ile Arg
Gly Thr Thr Pro Gln Val Trp Leu Ile Arg Asn Thr Ala Asn Arg Glu
Arg Met Glu Ile Phe Phe Thr Ile Leu Ile Met Thr Leu Val Val Ser
Leu Ser Gly Val Val Thr Arg Val Leu Pro Phe Gln Val Pro Leu Pro
```

Leu Met Gln Ile Ala Ile Gly Ala Leu Leu Ala Trp Pro Thr Phe Gly 90 Leu His Val Glu Phe Asp Pro Glu Leu Phe Leu Val Leu Phe Ile Pro 105 Pro Leu Leu Phe Ala Asp Gly Trp Lys Thr Pro Thr Arg Glu Phe Leu 120 Glu His Gly Arg Glu Ile Phe Gly Leu Ala Leu Ala Leu Val Val Val 135 Thr Val Val Gly Ile Gly Phe Leu Ile Tyr Trp Ala Val Pro Gly Ile 150 155 Pro Leu Ile Pro Ala Phe Ala Leu Ala Ala Val Leu Ser Pro Thr Asp 170 165 Ala Val Ala Leu Ser Gly Ile Val Gly Glu Gly Arg Ile Pro Lys Lys 185 180 Ile Met Gly Ile Leu Gln Gly Glu Ala Leu Met Asn Asp Ala Ser Gly 200 195 205 Leu Val Ala Leu Lys Phe Ala Val Ala Val Ala Met.Gly Thr Met Val 215 Phe Thr Val Gly Gly Ala Thr Leu Glu Phe Phe Lys Val Ala Ile Gly 230 235 Gly Ile Leu Ala Gly Phe Val Val Ser Trp Leu Tyr Gly Arg Ser Leu 245 250 Arg Phe Leu Ser Arg Trp Gly Gly Asp Glu Pro Ala Thr Gln Ile Val 265 Leu Leu Phe Leu Leu Pro Phe Ala Ser Tyr Leu Ile Ala Glu His Ile 280 Gly Val Ser Gly Ile Leu Ala Ala Val Ala Ala Gly Met Thr Ile Thr 295 Arg Ser Gly Val Met Arg Arg Ala Pro Leu Ala Met Arg Leu Arg Ala 310 315 Asn Ser Thr Trp Ala Met Leu Glu Phe Val Phe Asn Gly Met Val Phe 325 330 Leu Leu Gly Leu Gln Leu Pro Gly Ile Met Glu Ser Ser Leu Ile 340 345 Ala Ala Glu Ala Asp Pro Asn Val Glu Val Trp Met Leu Phe Thr Asp 360 Ile Val Leu Ile Tyr Leu Ala Leu Met Leu Val Arg Phe Gly Trp Leu 375 380 Trp Thr Met Lys Lys Phe Ser Val Arg Phe Leu Thr Lys Lys Pro Met 390 395 Glu Phe Gly Ser Trp Thr Thr Arg Glu Leu Leu Ile Ala Ser Phe Ala 405 410 Gly Val Arg Gly Ala Ile Thr Leu Ala Gly Val Leu Ser Ile Pro Leu 420 425 Leu Leu Pro Thr Gly Asp Val Phe Pro Ala Arg Tyr Glu Leu Val Phe 440 445 Leu Ala Ala Gly Val Ile Leu Phe Ser Leu Phe Val Gly Val Ile Met 455 460 Leu Pro Ile Leu Leu Gln His Ile Asp Ala Gly Asp Ser Ser Gln Gln 470 475 His Lys Glu Glu Arg Ile Ala Arg Ala Ala Thr Ala Glu Val Ala Ile 490 Val Ala Ile Glu Lys Met Glu Glu Arg Leu Ala Ala Asp Ala Glu Glu 505 Asn Ile Asp Asn Gln Leu Leu Lys Glu Val Ser Ser Arg Val Ile Gly 520 Asn Leu Arg Arg Ala Asp Gly Arg Asn Asp Val Glu Ser Ser Leu 535 540 Gln Glu Glu Asn Leu Glu Arg Arg Phe Arg Leu Ala Ala Leu Arg Ser 550 555 Glu Arg Ala Glu Leu Tyr His Leu Arg Ala Thr Arg Gln Ile Ser Asn

570 565 Glu Thr Leu Gln Lys Leu Leu His Asp Leu Asp Leu Glu Ala Leu 585 580 Leu Ile Glu Asn Gln 595 <210> 9536 <211> 252 <212> PRT <213> Enterobacter cloacae <400> 9536 Trp Cys Trp Ala Pro Pro Pro Gly Trp Trp Ile Arg Cys Ile Ala Leu Lys Ser Ala Gly Arg Ser Met Thr Asn Phe Gln Ile Ser Leu Leu Cys Leu Ile Ala Thr Val Val Ile Tyr Phe Ala Asn Lys Arg Leu Tyr Arg Arg Phe Arg Ala Leu Pro Leu Met Pro Leu Val Phe Thr Pro Ile Leu Leu Val Leu Met Leu Val Phe Gly His Ile Ser Trp Gln Asn Tyr Ile Gly Glu Ser His Trp Leu Leu Trp Leu Leu Gly Pro Ala Thr Ile Ala 90 85 Phe Ala Val Pro Val Tyr Asp Asn Leu Ala Ile Ile Arg Arg His Trp 105 100 Met Ser Leu Ser Ala Gly Val Val Thr Ala Thr Val Val Ala Val Cys 120 115 Ser Ser Val Trp Leu Ala Arg Leu Phe Thr Leu Ser Asp Glu Ile Gln 135 140 Arg Ser Leu Ala Val Arg Ser Val Thr Thr Pro Phe Ala Leu Ala Ala . 155 150 Ala Lys Pro Leu Gly Gly Gln Pro Asp Leu Val Ala Leu Phe Val Val 170 165 Val Thr Gly Val Phe Gly Met Ala Val Gly Asp Met Leu Phe Leu Arg 180 185 Leu Ser Ile Arg Glu Gly Met Ala Lys Gly Ala Gly Phe Gly Ala Ala 200 Ser His Gly Ala Gly Thr Ala Arg Ser Tyr Glu Leu Gly Gln Glu 215 220 Gly Val Val Ala Ser Leu Val Met Met Leu Ser Gly Val Thr Met Val 230 235 Leu Ile Ala Pro Leu Val Ala Trp Met Met Phe 245 <210> 9537 <211> 420 <212> PRT <213> Enterobacter cloacae <400> 9537 Ile Thr Asp Asn Asp Thr Phe Cys Ser Glu Met Pro Cys Ser Leu Arg Leu Ala Gln His Ala Val Gln Met Ile Leu Ile Arg Arg Val Lys Lys 25 Ser His Lys Pro Thr Gln His Asn Ser Tyr Pro Phe Ser Met Ser Pro Tyr Ser Cys Ser Phe Asp Gly Ala Glu Ile Ser Leu Arg Lys Ser Val 55 Ser Met Lys Asn Leu Lys Val Ser Leu Ala Trp Gln Ile Leu Leu Ala

```
Leu Val Leu Gly Ile Leu Leu Gly Ser Tyr Leu His Tyr His Ser Asp
                                    90
Ser Arg Glu Trp Leu Ile Ala Asn Leu Leu Ser Pro Ala Gly Asp Ile
            100
                                105
                                                    110
Phe Ile His Leu Ile Lys Met Ile Val Val Pro Ile Val Ile Ser Thr
                            120
Leu Val Val Gly Ile Ala Gly Val Gly Asp Ala Lys Gln Leu Gly Arg
                        135
                                            140
Ile Gly Val Lys Thr Ile Leu Tyr Phe Glu Val Ile Thr Thr Val Ala
                    150
                                        155
Ile Val Leu Gly Ile Thr Leu Ala Asn Val Phe Gln Pro Gly Ala Gly
                165
                                    170
Ile Asp Met Ser Gln Leu Ala Thr Val Asp Ile Ser Lys Tyr Gln Ser
            180
                                185
Thr Thr Ala Asp Val Gln Ser His Ser His Gly Leu Met Gly Thr Ile
                            200
Leu Ser Leu Val Pro Thr Asn Ile Ile Ala Ser Met Ala Lys Gly Glu
                        215
Met Leu Pro Ile Ile Phe Phe Ser Val Leu Phe Gly Leu Gly Leu Ser
                    230
                                        235
Ser Leu Pro Ala Thr His Arg Glu Pro Leu Val Thr Val Phe Arg Ser
                245
                                    250
Ile Ser Glu Thr Met Phe Lys Val Thr His Met Val Met Arg Tyr Ala
            260
                                265
Pro Val Gly Val Phe Ala Leu Ile Ala Val Thr Val Ala Asn Phe Gly
       275
                            280
Phe Ala Ser Leu Trp Pro Leu Ala Lys Leu Val Ile Leu Val His Phe
                        295
                                            300
Ala Ile Leu Phe Phe Ala Leu Val Val Leu Gly Ile Val Ala Arg Leu
                    310
                                        315
Cys Gly Leu Ser Ile Trp Ile Leu Ile Arg Ile Leu Lys Asp Glu Leu
                325
                                    330
Ile Leu Ala Tyr Ser Thr Ala Ser Ser Glu Ser Val Leu Pro Arg Ile
            340
                                345
                                                    350
Ile Glu Lys Met Glu Ala Tyr Gly Ala Pro Ala Ser Ile Thr Ser Phe
       355
                            360
                                                365
Val Val Pro Thr Gly Tyr Ser Phe Asn Leu Asp Gly Ser Thr Leu Tyr
                        375
                                            380
Gln Ser Ile Ala Ala Ile Phe Ile Ala Gln Leu Tyr Gly Ile Asp Leu
                   390
                                       395
Ser Leu Trp Gln Glu Ile Val Leu Val Leu Thr Leu Met Val Thr Ser
                405
                                 410
Lys Gly Ile Ala
            420
<210> 9538
<211> 280
<212> PRT
<213> Enterobacter cloacae
<400> 9538
Pro Leu Leu Gly Gly Arg Arg Gly Ala Asn Pro Pro Val Leu Thr Val
Ser Arg Cys Arg Phe Leu Pro Gly Glu Asp His Pro Asp Gln Gly Gly
```

20 25 30

Glu Ile Met Lys Met Phe Ile His Ile Ala Leu Leu Ala Ser Leu Ala
35 40 45

Ser Pro Leu Ala Trp Ser Ala Gly Thr Val Gln Val Tyr Thr Pro Asp

Ser Glu Lys Pro Lys Thr Leu Thr Asn Ala Arg His Leu Leu Asp Leu

60

55

```
Val Gly Gln Pro Arg Leu Ala Lys Ser Trp Trp Thr Gly Ala Val Ile
                                    90
                85
Ser Glu Arg Gln Ala Thr Ile Val Ala Glu Gln Lys His Gln Ala Leu
                                105
Leu Ala Arg Leu Ser Gly Leu Ala Gln Glu Asp Ala Asp Asp Ala
                            120
Ala Ala Ile Thr Ser Leu Arg Gln Gln Leu Gln Ala Val Lys Val Thr
                        135
                                            140
Gly Arg Gln Lys Val Asn Leu Asp Pro Asp Glu Val Arg Val Ala Glu
                    150
                                        155
Asn Gly Asn Pro Ser Leu Glu Gly Asp Tyr Thr Leu Trp Leu Pro Ala
                                    170
                165
Gln Pro Ser Thr Val Thr Val Met Gly Leu Leu Ser Ser Pro Gly Lys
            180
                                185
Lys Pro Phe Thr Pro Gly Arg Asp Val Ala Ser Tyr Leu Asp Glu Gln
                            200
                                                205
Ser Leu Leu Ser Gly Ala Asp Lys Ser Tyr Ala Trp Val Val Tyr Pro
                        215
                                            220
Asp Gly His Thr Gln Lys Ala Pro Val Ala Tyr Trp Asn Lys Arg His
                    230
                                        235
Ile Glu Pro Met Pro Gly Ser Ile Ile Phe Val Gly Phe Ala Asp His
                245
                                    250
Phe Trp Thr Lys Ala Tyr Asp Gly Leu Asn Ala Asp Ile Leu Arg Ser
                                265
Leu Ile Gln Arg Ile Pro Glu
        275
                            280
<210> 9539
<211> 123
<212> PRT
<213> Enterobacter cloacae
<400> 9539
Lys Met Val Lys Tyr Ala Thr Pro Cys Asn Thr Leu Arg Gly Val Leu
1
                                    10
Leu Ser Glu Gln Gln Leu Ile Phe Gly Met Ile Leu Val Thr Ile Ala
                                25
Ala Ser Phe Gly Asn Ser Trp Glu Ser Thr Met Leu Glu Leu Leu Phe
                            40
Val Ile Gly Phe Phe Ile Met Leu Met Val Thr Gly Val Ser Leu Leu
                        55
                                            60
Gly Ile Leu Ala Ala Leu Val Val Ala Thr Val Val Met Phe Val Gly
                                        75
                    70
Gly Leu Phe Ala Leu Thr Ile Lys Leu Leu Pro Trp Leu Leu Ala
                85
                                    90
Ile Ala Val Val Trp Ala Ile Arg Ala Ile Lys Ser Pro Lys Leu Pro
                                105
Ser Tyr Gln Arg Asn Asn Arg Phe Arg Tyr
                            120
<210> 9540
<211> 403
<212> PRT
<213> Enterobacter cloacae
<400> 9540
Ser Gly Glu His Arg Val Phe Gln Lys Val Asp Ala Tyr Ala Gly Asp
Pro Ile Leu Ser Leu Met Glu Arg Phe Lys Glu Asp Pro Arg Ser Asp
```

Lys Val Asn Leu Ser Ile Gly Leu Tyr Tyr Asn Glu Asp Gly Ile Ile

```
40
Pro Gln Leu Lys Ala Val Ala Glu Ala Glu Ala Arg Leu Asn Ala Thr
                        55
Pro His Gly Ala Ser Leu Tyr Leu Pro Met Glu Gly Leu Asn Thr Tyr
                                         75
                    70
Arg Asn Thr Ile Ala Pro Leu Leu Phe Gly Ala Asp His Ala Val Leu
                85
                                     90
Ala Gln Lys Arg Val Ala Thr Ile Gln Thr Leu Gly Gly Ser Gly Ala
            100
                                 105
Leu Lys Val Gly Ala Asp Phe Leu Lys Lys Tyr Phe Pro Asp Ser Gly
                            120
                                                 125
Val Trp Val Ser Asp Pro Thr Trp Glu Asn His Val Ala Ile Phe Glu
                        135
                                             140
Gly Ala Gly Phe Lys Val Glu Thr Tyr Pro Trp Phe Asp Ser Glu Thr
                                         155
                    150
Asn Gly Val Arg Val Asp Ala Leu Leu Glu Lys Leu Asn Thr Leu Pro
                165
                                     170
Glu Arg Ser Ile Val Leu Leu His Pro Cys Cys His Asn Pro Thr Gly
                                 185
Ala Asp Leu Thr Asn Ala Gln Trp Asp Ala Val Ile Glu Ile Leu Lys
                            200
Ala Arg Asn Leu Ile Pro Phe Leu Asp Ile Ala Tyr Gln Gly Phe Gly
                                             220
                        215
Ala Gly Met Glu Glu Asp Ala Tyr Ala Ile Arg Ala Ile Ala Ser Ala
                    230
                                         235
Gly Leu Pro Ala Leu Val Ser Asn Ser Phe Ser Lys Ile Phe Ser Leu
                245
                                     250
Tyr Gly Glu Arg Val Gly Gly Leu Ser Val Val Cys Glu Asp Ala Glu
                                 265
Ala Ala Gly Arg Val Leu Gly Gln Leu Lys Ala Thr Val Arg Arg Ile
        275
                            280
Tyr Ser Ser Pro Pro Asn Phe Gly Ala Gln Val Val Ala Thr Val Leu
                        295
Gly Asp Glu Arg Leu Lys Ala Thr Trp Leu Ala Glu Val Glu Ala Met
                    310
                                         315
Arg Lys Arg Ile Leu Ser Met Arg Gln Glu Leu Val Asn Val Leu Lys
                                     330
                325
Glu Ala Val Pro Gly His Asn Phe Asp Tyr Leu Leu Lys Gln Arg Gly
                                345
            340
Met Phe Ser Tyr Thr Gly Leu Ser Ala Ala Gln Val Asp Arg Leu Arg
                            360
Glu Glu Phe Gly Val Tyr Leu Ile Ala Ser Gly Arg Met Cys Val Ala
                                             380
                        375
Gly Leu Asn Ala Ser Asn Val Gln Arg Val Ala Gln Ala Phe Ala Ala
385
                    390
                                         395
Val Met
```

```
<210> 9541
```

## <400> 9541

<sup>&</sup>lt;211> 183

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

5134 55 Arg Val Val Leu Phe Gly Lys Leu Ala Glu Val Ala Gly Glu Tyr Leu 70 75 Arg Lys Gly Ser Gln Val Tyr Ile Glu Gly Gln Leu Arg Thr Arg Lys 90 Trp Thr Asp Gln Ser Gly Gln Glu Lys Tyr Thr Thr Glu Val Val Val 105 Asn Val Gly Gly Thr Met Gln Met Leu Gly Gly Arg Gln Gly Gly 115 120 Ala Pro Ala Gly Gly Gly Gln Gln Gly Gly Trp Gly Gln Pro Gln 135 140 Gln Pro Gln Gly Gly Asn Gln Phe Ser Gly Gly Ala Gln Ser Arg Pro 155 150 Gln Gln Gln Ser Ala Pro Ala Pro Ser Asn Glu Pro Pro Met Asp Phe 165 170 Asp Asp Asp Ile Pro Phe 180 <210> 9542 <211> 492 <212> PRT <213> Enterobacter cloacae <400> 9542 Phe Arg Gly Leu Ile Leu Leu Phe Arg Tyr Glu Leu Leu Arg Leu Leu Ser Arg Leu Met Thr Cys Glu Lys Ile Met Lys Glu Gln Arg Arg Glu Ile Ile Asn Asp Ser Met Gln Ala Leu His Ala Leu Ala Lys Leu Met Pro Gln Leu Asn Ala Gln Cys Ser Pro Val Glu Met Leu Glu Thr Ile Asn Ser Ala Leu Gly Ala Asn Leu Ser Trp Val Ser Val Glu Ser Ala 70 Asp Gly Pro Arg Val Val Cys Ala Gly Asp Val Thr Cys His Ala Phe 90 Asn Val Ala Asp Phe Leu Ala Ser Thr Leu Leu Gln Arg His His Arg 100 105 Ala Trp Arg Val Ile Tyr Trp Lys Ala His Ile Gly Arg Ala Val Phe 115 120 Ser Pro Gln His Pro Gly Tyr Ala Arg Leu Gln Ser Gly Val Leu Cys 135 140 Lys Leu Ser Ala His Gly Arg Gln Cys Ser Gly Tyr Phe Phe Leu Ala 150 155 Phe Asn Gly Lys Leu Thr Ser Leu Pro Ile Leu Lys Asn Ile Val Val 165 170 Val Leu Val Glu Lys Leu Lys Asp Tyr Phe Asp Asp Ile Ile Val Arg

 Glu Lys Thr Ala Gln Glu Met Gln Arg Val Val Thr Gln Tyr Lys Thr
 195
 200
 205

 Leu Phe Glu Arg Ala Pro Val Leu Met Asn Ala Phe Asp Arg His Asn 210
 215
 220

 Arg Cys Val Leu Trp Asn Ala Glu Cys Glu Lys Val Phe Gly Trp Ser 225
 230
 235
 240

185

180

 Met
 Thr
 Glu
 Ile
 Asp
 Glu
 His
 Pro
 Asp
 Pro
 Leu
 Ala
 Leu
 Phe
 Tyr
 Pro

 Asp
 Pro
 Glu
 Glu
 Arg
 Glu
 Glu
 Ser
 Val
 Arg
 Phe
 Ala
 Pro

 Leu
 Lys
 Asp
 Met
 Tyr
 Glu
 Trp
 His
 Pro
 Val
 Arg
 Lys
 Asp
 Gly
 Thr
 Gln

275 280 285

Leu Thr Ile Leu Trp Ser Asn Ile Leu Leu Pro Asp Asn Ser Ile Leu

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295
Asn Ile Gly Leu Asp Ile Thr Glu Arg Lys Lys Ala Glu Gln Gln Leu
                                        315
                    310
Thr Val Lys Ala Thr Thr Asp Asp Leu Thr Gly Cys Leu Asn Arg Ser
                                    330
                325
Thr Ile Leu Gln Gln Leu Lys Met Ala Leu Ala Ala Ser Ser Pro Gln
                                345
            340
Asp Val Ser Ser His Phe Cys Leu Leu Met Phe Asp Leu Asp Tyr Phe
                            360
Lys Gln Ile Asn Asp Arg Trp Gly His Gln Val Gly Asp Ala Ala Leu
                        375
                                             380
Ile His Phe Cys Asp Arg Ile Arg Glu Val Ser Pro Ala Gly Ser Ala
                    390
                                         395
Leu Gly Arg Val Gly Gly Glu Glu Phe Val Leu Leu Leu Ala Arg Thr
                405
                                     410
Asp Gly Met Ala Ala Thr Leu Leu Ser Ser Arg Leu Arg Ala Ala Leu
            420
Ile Ser Lys Pro Leu Arg Val Gly Asp Lys Thr Leu Val Leu Ser Phe
                            440
Ser Ala Gly Val Val Glu Val Cys Gln Gly Gln Arg Asp Thr Ser Ala
                        455
Ile Leu Met Arg Ala Asp Lys Ala Leu Tyr Asp Ala Lys Arg Thr Gly
                   470
                                        475
Arg Gly Lys Thr Val Leu Ala Ser Asp Tyr Leu
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<210> 9543

<211> 246

<212> PRT

<213> Enterobacter cloacae

<400> 9543 Pro Asn Phe Phe Arg Glu Val Ala Gln Phe Ser Ile Val Lys Lys Tyr 10 Glu Ser Ser Glu Asn Ile Met Leu Thr Val His His Leu Asn Gln Ser 20 25 Arg Ser His Arg Val Leu Trp Ala Leu Glu Glu Leu Gly Leu Thr Tyr 40 4.5 Asp Ile Val Arg Tyr Gln Arg Glu Lys Thr Met Leu Ala Pro Asp Ser 55 60 Leu Lys Lys Val His Pro Leu Gly Lys Ser Pro Val Leu Glu Asp Asn 70 75 Gly Leu Val Leu Ala Glu Ser Gly Ala Ile Met Glu Tyr Leu Gln Glu 85 90 Thr Tyr Asp Ser Ala Ser Arg Phe Lys Pro Leu Asp Pro Ala His Lys 100 105 Val Gln Tyr Arg Phe Trp Leu His Tyr Ala Glu Gly Ser Leu Met Pro 120 Leu Leu Met Lys Leu Val Phe Asn Ser Leu Gly Lys Pro Pro Val 135 140 Pro Phe Gly Leu Arg Thr Leu Gly Lys Ala Leu Gly Gln Gly Val Gln 150 155 Lys Ala Tyr Leu Asn Arg Gln Leu Glu Thr His Ala Arg Phe Ile Asn 165 170 Asp His Leu Ala Glu Asn Ser Trp Phe Ala Gly Asp Thr Leu Thr Met 185 Ala Asp Ile Gln Met Ser Phe Pro Leu Phe Ala Leu Leu Ala Arg Gly 200 Gly Ile Asp Asn Leu Asp His Ile Ala Ala Trp Lys Gln Arg Val Glu 215 220 Ala Arg Pro Gly Trp Gln Thr Thr Leu Ala Lys Gly Gly Pro Leu Thr

235

240

Ile Pro Gly Glu Gly

245 <210> 9544 <211> 473 <212> PRT <213> Enterobacter cloacae <400> 9544 Arg Leu Ala Gly Ser Gly Val Ser Thr Ser Leu Thr Asp Phe Leu Lys 10 Asn Ser Gln Gly Met Phe Ser Met Ser Thr Pro Ser Ala Arg Thr Gly 20 25 Gly Ser Leu Asp Ala Met Phe Lys Ile Ser Ala Arg Gly Ser Thr Val 40 Arg Gln Glu Val Val Ala Gly Leu Thr Thr Phe Leu Ala Met Val Tyr Ser Val Ile Val Val Pro Gly Met Leu Gly Lys Ala Gly Phe Pro Pro Ala Ala Val Phe Val Ala Thr Cys Leu Val Ala Gly Val Gly Ser Ile Val Met Gly Leu Trp Ala Asn Leu Pro Leu Ala Ile Gly Cys Ala Ile 105 Ser Leu Thr Ala Phe Thr Ala Phe Ser Leu Val Leu Gly Gln Gln Ile 120 Ser Val Pro Val Ala Leu Gly Ala Val Phe Leu Met Gly Val Leu Phe 135 140 Thr Val Ile Ser Ala Thr Gly Ile Arg Ser Trp Ile Leu Arg Asn Leu 150 155 Pro Gln Gly Val Ala His Gly Thr Gly Ile Gly Ile Gly Leu Phe Leu 170 165 Leu Leu Ile Ala Ala Asn Gly Val Gly Leu Val Ile Lys Asn Pro Leu 180 185 Asp Gly Leu Pro Val Ala Leu Gly Asn Phe Ala Ser Phe Pro Val Ile 200 Met Ser Leu Val Gly Leu Ala Val Ile Ile Gly Leu Glu Lys Leu Lys 215 220 Val Pro Gly Gly Ile Leu Leu Thr Ile Ile Gly Val Ser Ile Val Gly 230 235 Leu Ile Phe Asp Pro Thr Val His Phe Ser Gly Ile Phe Ala Met Pro 245 250 Ser Leu Ser Asp Asp Lys Gly Asn Ser Leu Ile Gly Ser Leu Asp Ile 265 Met Gly Ala Leu Asn Pro Val Ile Leu Pro Ser Val Leu Ala Leu Val 280 285 Met Thr Ala Val Phe Asp Ala Thr Gly Thr Ile Arg Ala Val Ala Gly 295 300 Gln Ala Asn Leu Leu Asp Lys Asp Gly Gln Ile Ile Asp Gly Gly Lys 315 Ala Leu Thr Thr Asp Ser Leu Ser Ser Val Phe Ser Gly Leu Val Gly 325 330 Ala Ala Pro Ala Ala Val Tyr Ile Glu Ser Ala Ala Gly Thr Ala Ala 345 Gly Gly Lys Thr Gly Leu Thr Ala Ile Thr Val Gly Val Leu Phe Leu 360 Leu Ile Leu Phe Leu Ser Pro Leu Ser Tyr Leu Val Pro Ala Tyr Ala 375 380 Thr Ala Pro Ala Leu Met Tyr Val Gly Leu Leu Met Leu Ser Asn Val 390 395 Ala Lys Ile Asp Phe Ala Asp Phe Val Asp Ala Met Ser Gly Leu Ile

405 410 Thr Ala Val Phe Ile Val Leu Thr Cys Asn Ile Val Thr Gly Ile Met 425 420 430 Ile Gly Phe Ala Ser Leu Val Ile Gly Arg Leu Val Ser Gly Glu Trp 440 435 445 Arg Lys Leu Asn Ile Gly Thr Val Val Ile Ala Val Ala Leu Val Ala 455 Phe Tyr Ala Gly Gly Trp Ala Ile <210> 9545 <211> 631 <212> PRT <213> Enterobacter cloacae <400> 9545 His Arg Gly Thr Phe Gln Ala Pro Gly Val Lys Thr Thr Gly Pro Tyr 10 Phe Met Leu Leu Val Tyr Pro Leu Phe Asp Gln His Phe Ala Thr Pro 20 25 Glu Gly Arg Asp Ser Ser Tyr Thr Phe Arg Val Phe Ser Pro Ala Phe Asp Ala Asp Gln Gly Asn Gly Ile Lys Thr Ile Thr Ile Phe Ile Cys 55 Arg Arg Tyr Asn Arg Pro Gln Ser Gln Phe Ser Asn Gln Lys Ser Ile 70 75 Ala Met Lys Asn Ile Asn Pro Thr Gln Thr Ala Ala Trp Gln Ala Leu 85 90 Gln Lys His Phe Asp Glu Met Lys Asp Val Thr Ile Ala Asp Leu Phe 105 100 110 Ala Lys Asp Ala Asp Arg Phe Ser Lys Phe Ser Ala Thr Phe Asp Asp 115 120 Leu Met Leu Val Asp Phe Ser Lys Asn Arg Ile Thr Glu Glu Thr Leu 135 140 Ala Lys Leu Gln Asp Leu Ala Lys Glu Thr Glu Leu Ala Asp Ala Ile 150 155 Lys Ser Met Phe Ser Gly Glu Lys Ile Asn Arg Thr Glu Asp Arg Ala 165 170 Val Leu His Val Ala Leu Arg Asn Arg Ser Asn Thr Pro Ile Ile Val 185 Asp Gly Lys Asp Val Met Pro Glu Val Asn Ala Val Leu Glu Lys Met 200 Lys Thr Phe Ser Glu Ala Ile Ile Ser Gly Ser Trp Lys Gly Tyr Thr 215 Gly Lys Ala Ile Thr Asp Val Val Asn Ile Gly Ile Gly Gly Ser Asp 230 235 Leu Gly Pro Phe Met Val Thr Glu Ala Leu Arg Pro Tyr Lys Asn His 245 250 Leu Asn Met His Phe Val Ser Asn Val Asp Gly Thr His Ile Ala Glu 265 Val Leu Lys Lys Val Asn Pro Glu Thr Thr Leu Phe Leu Val Ala Ser 280 275 285 Lys Thr Phe Thr Thr Gln Glu Thr Met Thr Asn Ala His Ser Ala Arg 295 300 Asp Trp Phe Leu Lys Thr Ala Gly Asp Glu Lys His Val Ala Lys His 310 315 Phe Ala Ala Leu Ser Thr Asn Gly Lys Ala Val Gly Glu Phe Gly Ile 330 325 Asp Thr Ala Asn Met Phe Glu Phe Trp Asp Trp Val Gly Gly Arg Tyr 345

Ser Leu Trp Ser Ala Ile Gly Leu Ser Ile Ile Leu Ser Val Gly Phe

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360 -
                                                365
Asp Asn Phe Val Glu Leu Leu Ser Gly Ala His Ala Met Asp Lys His
                       375
                                            380
Phe Ser Thr Thr Ala Pro Glu Lys Asn Leu Pro Val Leu Leu Ala Leu
                    390
                                        395
Ile Gly Ile Trp Tyr Asn Asn Phe Phe Gly Ala Glu Thr Glu Ala Ile
                405
                                    410
Leu Pro Tyr Asp Gln Tyr Met His Arg Phe Ala Ala Tyr Phe Gln Gln
            420
                                425
Gly Asn Met Glu Ser Asn Gly Lys Tyr Val Asp Arg Asn Gly Asn Ala
                            440
Val Asp Tyr Gln Thr Gly Pro Ile Ile Trp Gly Glu Pro Gly Thr Asn
                        455
                                            460
Gly Gln His Ala Phe Tyr Gln Leu Ile His Gln Gly Thr Lys Met Val
                    470
                                        475
Pro Cys Asp Phe Ile Ala Pro Ala Ile Thr His Asn Pro Leu Ser Asp
                485
                                    490
His His Pro Lys Leu Leu Ser Asn Phe Phe Ala Gln Thr Glu Ala Leu
            500
                                505
Ala Phe Gly Lys Ser Arg Glu Val Val Glu Gln Glu Tyr Arg Asp Gln
        515
                            520
                                                525
Gly Lys Asp Pro Ala Thr Leu Glu His Val Val Pro Phe Lys Val Phe
    530
                        535
                                            540
Glu Gly Asn Arg Pro Thr Asn Ser Ile Leu Leu Arg Glu Ile Thr Pro
                    550
                                        555
Phe Ser Leu Gly Ala Leu Ile Ala Leu Tyr Glu His Lys Ile Phe Thr
                                    570
                565
Gln Gly Ala Ile Leu Asn Ile Phe Thr Phe Asp Gln Trp Gly Val Glu
                                                    590
            580
                                585
Leu Gly Lys Gln Leu Ala Asn Arg Ile Leu Pro Glu Leu Gly Asp Asp
        595
                            600
Lys Ala Ile Asp Ser His Asp Ser Ser Thr Asn Gly Leu Ile Asn Arg
                        615
                                            620
Tyr Lys Ala Trp Arg Ala
<210> 9546
<211> 227
<212> PRT
<213> Enterobacter cloacae
<400> 9546
Pro His Phe Gly Val Val Ile Ser Pro Leu Arg Arg Val Val Lys
Arg Pro Ala Ile Ile Leu Ile Cys Leu Leu Gln Ala Cys Ser Ala
                                25
Thr Thr Lys Gly Leu Gly His Ser Leu Trp Asp Ser Met Phe Gly Thr
                            40
Pro Gly Val His Leu Thr Asp Asp Glu Leu Gln Asn Met Pro Tyr Ala
                        55
                                            60
Ser Gln Tyr Met Gln Leu Asn Asp Gly Pro Gln Leu Phe Val Val Leu
                    70
                                        75
Ala Phe Asp Glu Asn Gly Gln Gln Lys Trp Val Thr Gln Asp Gln Ala
               85
                                    90
Thr Ile Val Thr Gln His Ser Arg Ile Val Lys Thr Leu Leu Gly Gly
            100
                                105
Asp Asn Leu Glu Val Asn Asn Leu Ala Glu Asp Pro Leu Ile Lys
                           120
                                                125
Pro Asn Gln Ile Val Asp Gly Ala Ser Trp Thr Arg Thr Met Gly Trp
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135

Thr Glu His Lys Gln Val Arg Tyr Ala Thr Ala Arg Ser Thr Phe Arg

140

150 155 Trp Asp Gly Thr Asp Ser Val Lys Val Gly Ser Asp Glu Thr Gln Val 165 170 . Arg Val Leu Asp Glu Glu Val Thr Thr Asp Gln Ala Thr Trp His Asn 180 185 Arg Phe Trp Val Asp Glu Glu Gly Gln Ile Arg Gln Ser Leu Gln Tyr 200 Leu Gly Ala Gly Phe Phe Pro Val Lys Thr Thr Leu Ile Lys Ala Ala 215 Lys Ser 225 <210> 9547 <211> 375 <212> PRT <213> Enterobacter cloacae <400> 9547 Arg Arg Glu Lys Gly Met Ala Ser Val Gln Leu Arg Asn Val Thr Lys 10 Ala Trp Gly Asp Val Val Ser Lys Asp Ile Asn Leu Asp Ile His 20 25 Glu Gly Glu Phe Val Val Phe Val Gly Pro Ser Gly Cys Gly Lys Ser 40 Thr Leu Leu Arg Met Ile Ala Gly Leu Glu Thr Ile Thr Arg Gly Asp 55 60 Leu Phe Ile Gly Asp Thr Arg Met Asn Asp Ile Pro Pro Ala Glu Arg 70 75 Gly Val Gly Met Val Phe Gln Ser Tyr Ala Leu Tyr Pro His Leu Ser 85 90 Val Ala Glu Asn Met Ser Phe Gly Leu Lys Leu Ala Gly Ala Lys Lys 105 Glu Thr Ile Asn Gln Arg Val Thr Gln Val Ala Glu Val Leu Gln Leu 120 Ala His Leu Glu Arg Lys Pro Lys Ala Leu Ser Gly Gly Gln Arg 135 .Gln Arg Val Ala Ile Gly Arg Thr Leu Val Ala Glu Pro Arg Val Phe 150 155 Leu Leu Asp Glu Pro Leu Ser Asn Leu Asp Ala Ala Leu Arg Val Gln 165 170 Met Arg Ile Glu Ile Ser Arg Leu His Lys Arg Leu Gly Arg Thr Met 180 185 Ile Tyr Val Thr His Asp Gln Val Glu Ala Met Thr Leu Ala Asp Lys 195 200 Ile Val Val Leu Asp Ala Gly Arg Val Ala Gln Val Gly Lys Pro Leu 215 220 Glu Leu Tyr His Tyr Pro Ala Asp Arg Phe Val Ala Gly Phe Ile Gly 230 235 Ser Pro Lys Met Asn Phe Leu Pro Val Lys Val Thr Ala Thr Ala Ile 250 245 Glu Gln Val Gln Val Glu Leu Pro Asn Arg Gln Gln Val Trp Leu Pro 265 270 260 Val Asp Ser Ala Asn Val Gln Val Gly Ala Asn Met Ser Leu Gly Ile 275 280 285 Arg Pro Glu His Leu Leu Pro Ser His Ile Ala Asp Val Thr Leu Glu 300 295 Gly Glu Val Gln Val Glu Gln Leu Gly His Glu Thr Gln Ile His 310 315 Ile Gln Ile Pro Ala Ile Arg Gln Asn Leu Val Tyr Arg Gln Asn Asp 330 325

Val Val Leu Val Glu Glu Gly Ala Thr Phe Ala Ile Gly Leu Pro Pro

345 340 Glu Arg Cys His Leu Phe Arg Glu Asp Gly Thr Ala Cys Arg Arg Leu 355 360 His Lys Glu Pro Gly Val 370 375 <210> 9548 <211> 451 <212> PRT <213> Enterobacter cloacae <400> 9548 Ala Phe Gln Leu Gln Arg Lys Ala Met Ile Ser Gly Asp Arg Ile Met 10 Ile Thr Leu Arg Lys Val Pro Leu Ala Val Ala Ile Ala Ala Gly Ile 25 Leu Ser Ala Gln Ala Gly Ala Val Asp Phe Lys Gly Tyr Ala Arg Ser 40 Gly Ile Gly Trp Thr Gly Ser Gly Gly Glu Gln Gln Cys Phe Gln Ala 55 Thr Gly Ala Gln Ser Lys Tyr Arg Leu Gly Asn Glu Cys Glu Thr Tyr 70 80 Ala Glu Leu Lys Leu Gly Gln Glu Val Trp Lys Glu Gly Asp Lys Ser 90 Phe Tyr Phe Asp Thr Asn Val Ala Tyr Ser Val Ser Gln Gln Asn Asp 100 105 Trp Glu Ser Thr Ser Pro Ala Phe Arg Glu Ala Asn Val Gln Gly Lys 120 Asn Leu Ile Glu Trp Leu Pro Gly Ser Thr Ile Trp Ala Gly Lys Arg 135 140 Phe Tyr Gln Arg His Asp Val His Met Ile Asp Phe Tyr Tyr Trp Asp 150 155 Ile Ser Gly Pro Gly Ala Gly Ile Glu Asn Ile Asp Leu Gly Phe Gly 165 170 Lys Leu Ser Leu Ala Ala Thr Arg Ser Ser Glu Ser Gly Gly Ser Ala 185 Thr Phe Ala Asp Arg Asp Ala Asn Gly Asp Arg Ile Tyr Asp Asn Val 200 Val Pro Asn Asp Val Phe Asp Val Arg Leu Ala Gly Leu Glu Thr Asn 215 220 Pro Gly Gly Thr Leu Glu Leu Gly Val Asp Tyr Gly His Thr Asn Ile 230 235 Pro Asp Asp Tyr Tyr Leu Gln Pro Gly Ala Ser Lys Asp Gly Trp Leu 245 250 Phe Thr Ala Glu His Thr Gln Ser Met Met Lys Gly Phe Asn Lys Phe 265 Val Leu Gln Tyr Gly Thr Asp Ser Met Thr Ser Asn Gly Lys Gly Ile 280 285 Pro Gln Gly Gly Ser Ile Asp Asn Asp Gly Ser Met Trp Arg Val Leu 295 300 Asp His Gly Ala Ile Thr Leu Ala Asp Arg Trp Asp Leu Met Tyr Val 310 315 Gly Met Tyr Gln Asn Ile Asp Arg Asp Asn Asn Gly Thr Glu Trp 325 330 Trp Thr Val Gly Val Arg Pro Met Phe Lys Trp Thr Pro Ile Met Ser 345 Thr Leu Leu Glu Val Gly Tyr Asp Asn Val Lys Ser Gln Lys Thr Asp 360 365 Asp Lys Asn Ser Gln Tyr Lys Ile Thr Leu Ala Gln Gln Trp Gln Ala 375 380

Gly Asp Ser Ile Trp Ser Arg Pro Ala Ile Arg Val Phe Ala Thr Tyr

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390
                                        395
Ala Lys Trp Asp Glu Lys Trp Gly Tyr Ala Asn Asn Asp Ser Gly Ala
                405
                                  410
Gly Tyr Thr Ser Gly Val Ala Tyr Ser Asp Thr Ser Ala Lys Thr Phe
                               425
           420
Ser Arg Gly Asp Asn Asp Glu Trp Thr Phe Gly Ala Gln Met Glu Ile
                            440
Trp Trp
   450
<210> 9549
<211> 332
<212> PRT
<213> Enterobacter cloacae
<400> 9549
Gly Ala Ala Arg Tyr Cys Leu Ala Thr Ala Val Leu Thr Leu Ser Glu
                                    10
Val Ile Thr Met Lys Met Lys Lys Ser Leu Val Ala Leu Cys Leu Ser
                                25
Ala Gly Leu Leu Ala Cys Ala Pro Ala Leu Thr Tyr Ala Asp Val Asn
                            40
Phe Val Pro Gln Asn Thr Ser Ala Ala Pro Ala Ile Pro Ala Ala Ala
                        55
Leu Gln Gln Leu Val Trp Thr Pro Val Asp Gln Ser Lys Thr Gln Thr
                    70
                                        75
Thr Gln Leu Ala Ala Gly Gly Gln Ser Leu Asn Val Pro Gly Ile Ser
                85
                                    90
Gly Pro Val Ala Ala Phe Ser Val Pro Ala Asn Ile Gly Glu Leu Thr
            100
                                105
Leu Thr Leu Thr Ser Glu Val Asn Lys Gln Thr Ser Val Phe Ala Pro
                            120
Asn Val Leu Ile Leu Asp Gln Ser Met Thr Pro Ser Ala Phe Pro
                        135
                                            140
Ser Asp Tyr Phe Ser Tyr Gln Glu Pro Gly Val Met Ser Ala Asp Arg
                    150
                                        155
Leu Glu Gly Val Met Arg Leu Thr Pro Ala Leu Gly Gln Gln Lys Ile
                                    170
Tyr Val Leu Val Phe Thr Thr Glu Lys Asp Leu Gln Gln Thr Thr Lys
                                185
                                                    190
Leu Val Asp Pro Ala Lys Ala Tyr Ala Lys Gly Thr Gly Asn Ala Val
       195
                            200
Pro Asp Ile Pro Asp Pro His Ala Arg His Thr Thr Asp Gly Leu Ile
                                            220
                        215
Lys Leu Lys Val Ser Thr Asn Ser Ala Ser Ser Val Leu Val Gly Pro
                   230
                                        235
Leu Phe Gly Ser Ser Gly Pro Gly Pro Val Thr Val Gly Asn Thr Ala
                245
                                    250
Ala Pro Val Tyr Ala Ala Pro Ala Ala Thr Pro Ala Ala Ala Pro Ala
           260
                                265
                                                    270
Pro Ala Lys Lys Ala Glu Pro Val Leu Asn Asp Thr Glu Thr Tyr Phe
       275
                            280
                                                285
Asn Asn Ala Ile Lys Gln Ala Val Lys Asn Gly Asp Val Asp Lys Ala
                       295
                                           300
Leu Lys Leu Leu Asp Glu Ala Glu Arg Leu Gly Ser Thr Thr Ala Arg
                  310
                                       315
Ser Thr Phe Ile Ser Ser Val Lys Gly Lys Gly
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<212> PRT <213> Enterobacter cloacae

<210> 9551 <211> 484 <212> PRT <213> Enterobacter cloacae

<400> 9551 Ser Phe Asp Pro Leu Phe Ile Ser Val Thr Pro Phe Thr Met Ala Gly 10 Asn Lys Pro Phe Asn Lys Gln Thr Glu Pro Arg Glu Arg Asp Tyr Gln 25 Val Ala Gly Leu Lys Val Pro Pro His Ser Ile Glu Ala Glu Gln Ser 40 Val Leu Gly Gly Leu Met Leu Asp Asn Glu Arg Trp Asp Asp Val Ala Glu Arg Val Val Ala Glu Asp Phe Tyr Thr Arg Pro His Arg His Ile 75 70 Phe Thr Glu Met Ala Arg Leu Gln Glu Ser Gly Ser Pro Ile Asp Leu Ile Thr Leu Ala Glu Ser Leu Glu Arg Leu Gly Gln Leu Asp Ser Val 100 105 110 Gly Gly Phe Ala Tyr Leu Ala Glu Leu Ser Lys Asn Thr Pro Ser Ala 120 Ala Asn Ile Ser Ala Tyr Ala Asp Ile Val Arg Glu Arg Ala Val Val 135 Arg Glu Met Ile Ser Val Ala Asn Glu Ile Ala Glu Ala Gly Phe Asp 150 Pro Gln Gly Arg Thr Ser Glu Asp Leu Leu Asp Leu Ala Glu Ser Arg 170 Val Phe Lys Ile Ala Glu Ser Arg Ala Asn Lys Asp Glu Gly Pro Lys 185 Asn Ile Ala Asp Val Leu Asp Ala Thr Val Ala Arg Ile Glu Gln Leu 195 200 Phe Gln Gln Pro His Asp Gly Val Thr Gly Val Asn Thr Gly Tyr Asp 215 220 Asp Leu Asn Lys Lys Thr Ala Gly Leu Gln Pro Ser Asp Leu Ile Ile 230 235 Val Ala Ala Arg Pro Ser Met Gly Lys Thr Thr Phe Ala Met Asn Leu 245 250 Val Glu Asn Ala Ala Met Leu Gln Asp Lys Pro Val Leu Ile Phe Ser 270 260 265 Leu Glu Met Pro Ser Glu Gln Ile Met Met Arg Ser Leu Ala Ser Leu 280 285 Ser Arg Val Asp Gln Thr Arg Ile Arg Thr Gly Gln Leu Asp Asp Glu 295 300 Asp Trp Ala Arg Ile Ser Gly Thr Met Gly Ile Leu Leu Glu Lys Arg 310 315

Asn Ile Tyr Ile Asp Asp Ser Ser Gly Leu Thr Pro Thr Glu Val Arg 325 330 Ser Arg Ala Arg Arg Ile Ala Arg Glu His Gly Gly Ile Gly Leu Ile 340 345 Met Ile Asp Tyr Leu Gln Leu Met Arg Val Pro Ser Leu Ser Asp Asn 360 355 Arg Thr Leu Glu Ile Ala Glu Ile Ser Arg Ser Leu Lys Ala Leu Ala 375 380 Lys Glu Leu His Val Pro Val Val Ala Leu Ser Gln Leu Asn Arg Ser 390 395 Leu Glu Gln Arg Ala Asp Lys Arg Pro Val Asn Ser Asp Leu Arg Glu 405 410 Ser Gly Ser Ile Glu Gln Asp Ala Asp Leu Ile Met Phe Ile Tyr Arg 425 Asp Glu Val Tyr His Glu Asn Ser Asp Leu Lys Gly Ile Ala Glu Ile 440 Ile Ile Gly Lys Gln Arg Asn Gly Pro Ile Gly Thr Val Arg Leu Thr 455 460 Phe Asn Gly Gln Trp Ser Arg Phe Asp Asn Tyr Ala Gly Pro Gln Tyr 470 475 Asp Asp Glu

<210> 9552 <211> 246

<211> 240 <212> PRT

<213> Enterobacter cloacae

245

<400> 9552

Gln Thr Glu Tyr Ser Gly Glu Asn Met Arg Lys Ile Thr Leu Ala Leu 10 Ser Ala Ala Cys Leu Leu Phe Ser Leu Asn Ser Thr Val Val Ala Arg 20 25 Ala Ser Ala Pro Thr Pro Leu Tyr Thr Gly Thr Thr Ala Ala Ile Leu 35 40 45 Ala Glu Gln Ala Pro Ile His Trp Val Ser Val Ala Gln Ile Glu Asn 55 Ser Leu Thr Gly Arg Pro Pro Met Ala Val Gly Phe Asp Ile Asp Asp 70 Thr Val Leu Phe Ser Ser Pro Gly Phe Trp Arg Gly Lys Lys Thr Tyr 90 Ser Pro Asp Ser Glu Ala Tyr Leu Lys Asn Pro Glu Phe Trp Glu Lys 100 105 Met Asn Asn Gly Trp Asp Glu Phe Ser Ile Pro Lys Glu Val Ala Arg 120 Ala Leu Ile Ala Met His Val Lys Arg Gly Asp Ser Ile Tyr Phe Val 135 140 Thr Gly Arg Ser Gln Thr Lys Thr Glu Thr Val Ser Lys Thr Leu Gln 150 155 Asp Asp Phe Leu Ile Pro Ala Ala Ser Met Asn Pro Val Ile Phe Ala 170 165 Gly Asp Gln Glu Gly Gln Asn Thr Lys Thr Gln Trp Leu Glu Lys Lys 180 185 190 Asn Ile Lys Val Phe Tyr Gly Asp Ser Asp Asn Asp Ile Thr Ala Ala 200 195 205 His Asp Val Gly Ala Arg Gly Ile Arg Val Leu Arg Ala Ser Asn Ser 215 220 Thr Tyr Arg Pro Leu Pro Met Ala Gly Lys Phe Gly Glu Glu Val Ile 230 235 Val Asn Ser Glu Tyr

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<210> 9553
<211> 128
<212> PRT
<213> Enterobacter cloacae
<400> 9553
Asn Tyr Arg Asn Ala Thr Arg Gly Ile Lys Met Thr Ile Ser Glu Ile
                                    10
Leu Gln Tyr Cys Met Ser Lys Pro Gly Ala Glu Gln Ser Val His Ser
            20
                                25
Asp Trp Lys Ala Thr Gln Ile Lys Val Gly Asp Val Leu Phe Ala Met
                            40
Val Lys Glu Val Asp Ala Arg Pro Ala Ala Ser Leu Lys Thr Ser Pro
                        55
Glu Leu Ala Asp Leu Leu Arg Gln Gln His Asp Asp Val Arg Pro Ser
                                        75
Lys His Leu Asn Lys Ala His Trp Ser Thr Val Phe Leu Asp Gly Ser
                85
Leu Pro Asp Ser Gln Ile Tyr Tyr Leu Val Asp Ala Ser Tyr Gln Gln
                                105
Ala Val Glu Leu Leu Pro Glu Thr Ile Arg Gln Gln Leu Ser Val
                            120
<210> 9554
<211> 196
<212> PRT
<213> Enterobacter cloacae
<400> 9554
His His Arg Arg Ala Ala Arg Gln Phe Gln Arg Arg Phe Lys Gly Phe
Arg Gln Thr Arg Arg Gln Ile Phe Thr Asp Leu Lys Pro Val Asn His
            20
                                25
His Phe Asp Gly Val Phe Leu Leu Gln Leu Gln Leu Trp Arg Ile Gly
                            40
Gln Val Thr His Phe Ala Val Asp Thr Gly Ala Asp Ile Ala Leu Ala
                        55
Cys Gln Ile Phe Gln Arg Phe Ser Met Phe Ala Leu Thr Leu Phe Asn
                    70
                                         75
Asp Arg Arg Gln Gln His Gln Ala Phe Ala Phe Arg Leu Arg Gln His
                                     90
Val Ile His His Leu Ala Asp Gly Leu Gly Arg Gln Arg Asn Val Val
                                105
Ile Arg Ala Ala Arg Leu Ala His Ala Arg Ile Gln Gln Thr Gln Val
                            120
Val Met Asp Phe Gly Asn Gly Thr Asp Arg Gly Ser Arg Val Met Arg
                        135
                                             140
Arg Gly Phe Leu Leu Asn Gly Asp Ser Arg Arg Gln Pro Phe Asn Val
                    150
                                        155
Val Asp Ile Arg Phe Phe His Gln Arg Gln Glu Leu Thr Arg Val Arg
                165
                                    170
Arg Glu Arg Phe Asn Val Thr Thr Leu Ser Phe Gly Ile Gln Ser Val
                                185
Glu Ser Gln
       195
<210> 9555
<211> 550
<212> PRT
<213> Enterobacter cloacae
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<400> 9555 Phe Met Gln Arg Asn His Leu Phe Ile Lys Ala Ala Gly Leu His Cys 10 Tyr Arg Arg Thr Thr Cys Arg Asp Thr Glu Arg Glu Met Asn Arg Ser 20 25 Ala Arg Arg Lys Met Leu Lys Val Val Gly Ile Ile Met Val Val Met 40 Leu Pro Val Met Leu Ala Leu Trp Phe Ala Gln Leu Ser Ala Val Ser 55 Glu Ile Ser Ala Gln Leu Arg Thr Phe Ala Glu Leu Ala Leu Asn Lys 75 Thr Glu Arg Val Ile Gln Gln Val Asp Leu Ala Arg Lys Asp Ala Glu 90 Lys Tyr Gln Gly Lys Val Cys Thr Pro Glu His Arg Gln Tyr Met Leu 105 Asn Val Ser Arg Gly Arg Leu Phe Val Ala Asp Leu Ile Tyr Ala Asp 120 Gly Gln Asp Phe Leu Cys Ser Thr Leu Phe Thr Pro Glu His Pro Tyr 135 140 Ile Ile Pro Ala Ala Asn Tyr Thr Arg Lys Pro Asp Val Ala Ile Tyr 150 155 Tyr Phe Arg Asp Thr Pro Phe Phe Asn Gly Tyr Lys Met Ile Tyr Met 170 175 165 Gln Arg Gly Asn Tyr Val Ala Val Val Asn Pro Leu Ser Tyr Ser Glu 180 185 190 Val Met Ser Asp Asp Arg Ser Leu Ser Trp Gly Val Tyr Asp Thr Val 200 205 Ser Asn Ala Phe Phe Ser Val Ser Gln Lys Ala Asn Ile Ser Leu Leu 215 220 His Ser Met Leu Arg His Gln Glu Thr Thr Phe Gln Lys Asp Asp Arg 230 235 Phe Tyr Thr Ile Val Lys Ser Glu Gln Arg Pro Ile Ala Ala Ile Val 245 250 Ser Thr Ser Ser Ala Arg Phe Tyr Lys Thr Leu Tyr His Gln Ala Thr 260 265 Leu Thr Leu Pro Leu Gly Ile Ile Cys Ser Ile Ile Ile Leu Leu Val 280 Trp Ser Arg Thr His Arg Glu Phe Asn Ser Pro Gly Arg Leu Leu His 295 300 Arg Ala Leu Asn Lys Arg Gln Leu Cys Val His Tyr Gln Pro Ile Ile 310 315 Asp Ile Lys Asn Asn Gln Cys Val Gly Ala Glu Ala Leu Leu Arg Trp 330 Pro Gly Phe Asn Gly Gln Val Met Ser Pro Ala Glu Phe Ile Pro Leu 345 Ala Glu Lys Glu Gly Met Ile Glu Arg Ile Thr Asp Tyr Val Val Glu 355 360 Glu Val Phe Ser Asp Leu Gly His Phe Leu Ala Ala His Pro Asp Leu 375 380 Tyr Val Ser Ile Asn Leu Ser Ala Ser Asp Phe His Ser Ser Arg Leu 390 395 Ile Ala Leu Ile Ser Asp Lys Ala Arg Phe Tyr Ser Val Arg Ala Gln 405 -410 Gln Ile Lys Ile Glu Val Thr Glu Arg Gly Phe Ile Asp Val Pro Lys 420 425 430 Thr Thr Pro Val Ile Gln Ala Phe Arg Gln Ala Gly Tyr Glu Val Ala 440 445 Ile Asp Asp Phe Gly Thr Gly Tyr Ser Asn Leu His Asn Leu Tyr Ser 455 460 Leu Asn Val Asp Ile Leu Lys Ile Asp Lys Ser Phe Ile Asp Thr Leu

470 475 Thr Thr Asn Ser Thr Ser His Leu Ile Ala Glu His Ile Ile Glu Met 485 490 Ala Gln Ser Leu Arg Leu Lys Thr Ile Ala Glu Gly Val Glu Thr Gly 505 Glu Gln Val Ser Trp Leu Leu Lys Arg Gly Val Gln Tyr Cys Gln Gly 520 525 Trp His Phe Ala Lys Ala Met Pro Pro Gln Ala Phe Met Ala Trp Gln 535 Gln Gln Pro Leu Arg 550 <210> 9556 <211> 159 <212> PRT <213> Enterobacter cloacae <400> 9556 Phe Ile Ser Val Asp Thr Val Arg Ser Leu Tyr Trp Arg Leu Val Ser 10 Phe Leu Arg Lys Thr Pro Met Ala Val Ala Leu Ser Arg Val Thr Pro 20 25 Ala Val Val Gln Arg Leu Gln Val Pro Val Gln Val Leu Leu Tyr Ala 40 Gly Leu Phe Val Phe Ala Glu Tyr Leu Val Asp Trp Leu His Leu Pro 60 Leu Pro Ala Asn Leu Val Gly Met Val Leu Met Leu Thr Leu Ile Leu 70 75 Cys Arg Ala Leu Pro Leu Asn Trp Val Arg Ala Gly Ala Arg Trp Leu 85 90 Leu Ala Glu Met Leu Leu Phe Phe Val Pro Ala Val Val Ala Val Val 105 Asn Tyr Ala Gln Leu Leu Met Val Asp Gly Trp Arg Ile Phe Ala Val 120 Ile Ala Leu Ser Thr Leu Met Val Leu Gly Ala Thr Ala Trp Val Val 135 Asp Lys Val Tyr Arg Phe Glu Ile Ser Arg Gln Lys His Asp 150 <210> 9557 <211> 511 <212> PRT <213> Enterobacter cloacae <400> 9557 Arg Leu Asn Ile Asn Asp Ala Gly Leu Ala Lys Ile Ser Ser Val 10 Pro Leu Val Val Ser Phe Leu Ile Leu Ile Ser Lys Asp Trp Thr Phe 25 Ile Arg His Ile Ser Ala Ser Phe Leu Leu Ile Ile Cys Leu Ser Gly 40 45 Ser Lys Glu Thr Gly Glu Ile Met Leu Thr Phe Leu Glu Leu Leu Ile 55 60 Gly Val Val Val Ile Val Gly Val Ala Arg Tyr Ile Ile Lys Gly Tyr 70 75 Ser Ala Thr Gly Val Leu Phe Val Gly Gly Leu Thr Leu Leu Ile Ile 90 Ser Ala Leu Met Gly His Gln Val Leu Pro Ala Ser Glu Ala Ser Thr 105 Gly Tyr Thr Ala Thr Asp Ile Val Glu Tyr Ile Lys Ile Leu Leu Met

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Ser Arg Gly Gly Asp Leu Gly Met Met Ile Met Met Leu Cys Gly Phe
                        135
                                            140
Ala Ala Tyr Met Thr His Ile Gly Ala Asn Asp Met Val Val Lys Leu
                    150
                                       155
Ala Ser Lys Pro Leu Gln Tyr Ile Asn Ser Pro Tyr Leu Leu Met Val
                                   170
Ala Ala Tyr Phe Leu Ala Cys Leu Met Ser Leu Ala Val Ser Ser Ala
                                185
Thr Gly Leu Gly Val Leu Leu Met Ala Thr Leu Phe Pro Val Met Val
                            200
Asn Val Gly Ile Ser Arg Gly Ala Ala Ala Ile Cys Ala Ser Pro
                       215
                                            220
Ala Ala Ile Ile Leu Ser Pro Thr Ser Gly Asp Val Val Leu Ala Ala
                    230
                                        235
Lys Ala Ala Glu Met Ser Leu Ile Asp Phe Ala Phe Lys Thr Thr Leu
                245
                                    250
Pro Ile Ser Ile Thr Ala Ile Leu Gly Met Gly Val Ala His Phe Phe
           260
                                265
Trp Gln Arg Tyr Leu Asp Lys Lys Glu Asn Val Ser His Glu Met Met
        275
                            280
Asp Val Ser Glu Ile Thr Thr Ala Pro Ala Phe Tyr Ser Ile Leu
                        295
                                            300
Pro Phe Met Pro Ile Ile Gly Val Leu Ile Phe Asp Gly Lys Trp Gly
                    310
                                        315
Pro Gln Leu His Ile Ile Thr Ile Leu Val Ile Cys Met Leu Leu Ala
                325
                                    330
Ala Ile Leu Glu Phe Val Arg Gly Phe Asn Thr Gln Lys Val Phe Thr
           340
                                345
Gly Leu Glu Val Ala Phe Arg Gly Met Ala Asp Ala Phe Ala Gly Val
                            360
Val Met Leu Leu Val Ala Ala Gly Val Phe Ala Gln Gly Leu Ser Thr
                        375
Ile Gly Phe Ile Gln Ser Leu Ile Ser Ile Ala Thr Ser Phe Gly Ser
                    390
                                        395
Ala Ser Ile Ile Leu Met Leu Val Leu Val Leu Thr Met Leu Ala
                                    410
Ala Met Thr Thr Gly Ser Gly Asn Ala Pro Phe Tyr Ala Phe Val Glu
           420
                                425
Met Ile Pro Lys Leu Ala His Ser Ser Gly Ile Asn Pro Ala Tyr Leu
                            440
Ser Ile Pro Met Leu Gln Ala Ser Asn Leu Gly Arg Thr Ile Ser Pro
                        455
                                            460
Val Ser Gly Val Val Val Ala Val Ala Gly Met Ala Lys Ile Ser Pro
                    470
                                        475
Phe Glu Val Val Lys Arg Thr Ser Val Pro Val Leu Val Gly Leu Ile
               485
                                    490
Ile Val Ile Ile Ala Thr Glu Val Leu Val Pro Gly Ala Ala
                                505
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<210> 9558

<211> 118

<212> PRT

<213> Enterobacter cloacae

<400> 9558

 Ser Trp Arg Tyr Leu Gln Glu Glu Phe His Met Ala Lys Lys Leu Ile

 1
 5
 10
 15

 Ala Leu Cys Ala Cys Pro Met Gly Leu Ala His Thr Phe Met Ala Ala 20
 25
 30

 Gln Ala Leu Glu Asp Ala Ala Thr Glu Ala Gly Tyr Glu Val Lys Ile
 25

<210> 9559

<211> 425

<212> PRT

<213> Enterobacter cloacae

<400> 9559

Ser Ser His Pro Gly Val Phe Val Met Ala Ile Lys Lys Arg Ser Ala 1 10 Val Arg Pro Asp Ser His Glu Gly Asp Thr Leu Ala Ile Lys Ser Ala 20 25 Pro Val Ala Ala Gly Ala Ser Phe Trp Lys Glu Leu Pro Gln His Ile Met Ser Gly Ile Ser Arg Met Val Pro Thr Leu Ile Met Gly Gly Val 55 Ile Leu Ala Ile Ser Gln Leu Ile Ala Tyr Val Trp Leu Glu Ile Pro Pro Asp Thr Gly Ile Leu Asp Ala Leu Asn Ser Gly Lys Phe Thr Gly Phe Asn Leu Ser Leu Leu Lys Phe Gly Tyr Leu Thr Glu Ser Phe Gly 105 Gly Leu Leu Phe Ser Phe Ala Ile Pro Met Phe Ala Ala Phe Val Ala 120 Asn Ser Ile Gly Gly Lys Leu Ala Phe Pro Ala Gly Phe Ile Gly Gly 135 Leu Val Ala Thr Gln Pro Thr Leu Val Leu Asn Phe Asp Ala Glu Lys 150 155 Leu Thr Trp Leu Ala Thr Lys Pro Val Pro Ser Thr Phe Ile Gly Ala 165 170 Leu Ile Ile Ala Ile Ala Ala Gly Tyr Leu Val Lys Trp Leu Asn Ser 185 Arg Ile Asn Val Pro Gln Tyr Leu Leu Ala Phe Lys Ser Thr Phe Leu 195 200 205 Ile Pro Ile Leu Ser Ala Leu Phe Val Met Leu Ala Met Tyr Tyr Ile 215 220 Ile Thr Pro Ile Gly Gly Trp Leu Asn Ala Gly Met Arg Thr Val Leu 230 235 Leu Ala Ala Gly Gln Ala Gly Ser Met Met Tyr Ala Ile Gly Met Ala 245 250 Ala Ala Thr Ala Ile Asp Leu Gly Gly Pro Ile Asn Lys Ala Ala Gly 260 265 Phe Val Gly Leu Gly Leu Thr Thr Asp His Val Leu Pro Ile Thr Ser 280 Arg Ala Val Ala Ile Val Ile Pro Pro Ile Gly Leu Gly Leu Ala Thr 295 300 Leu Ile Asp His Arg Leu Thr Gly Lys Arg Leu Phe Ser Pro Gln Leu 310 315 Tyr Pro Gln Gly Lys Thr Ala Met Phe Leu Ala Phe Met Gly Ile Ser 325 330 Glu Gly Ala Ile Pro Phe Leu Leu Glu Asn Pro Leu Ala Thr Leu Pro 345

<210> 9560

<211> 374 <212> PRT

<213> Enterobacter cloacae

<400> 9560

Arg Cys Gly Ala Gly Asp Gly Asn Gly Arg Arg Gly Ala Leu Tyr Leu 10 Arg Gln Thr Ala Ile Ala Asp Gly Arg Ile Arg Val Asp Arg Asp Leu 20 25 Leu Arg Ala Leu Ser Glu Ala Asp Ala Ile Ala Ala Ser Glu Gln Glu 40 Val Arg Asp Ile Leu Leu Ser Glu Ala Gln Lys Tyr His Lys Glu Val Gln Phe Asp Gly Leu Gly Ser Val Leu Ile Arg Val Asn Gln Ser Arg 70 75 Gly Pro Lys Val Met Val Cys Ala His Met Asp Glu Val Gly Phe Met 90 Val Arg Ser Val Ser Arg Glu Gly Ala Ile Asp Val Leu Pro Ile Gly 100 105 Asn Val Arg Met Met Ala Arg Thr Leu Gln Pro Val Arg Ile Thr Thr 120 125 Arg Asn Gly Glu Lys Ile Pro Gly Leu Leu Asp Gly Asp Leu Lys Gly 135 140 Glu Asn Val Asp Asn Leu Arg Val Asp Ile Gly Ala Thr Ser Ala Glu 150 Glu Val Phe Ala Ala Gly Ile Asp Ala Gly Asp Arg Val Thr Phe Asp 170 Thr Pro Phe Gln Thr Leu Pro His Asn Arg Val Met Gly Lys Ala Phe 180 185 Asp Asp Arg Leu Gly Cys Tyr Leu Leu Ile Ala Leu Leu Arg Glu Leu 195 200 His Gln Thr Pro Leu Asp Cys Glu Leu Trp Leu Val Ala Ser Ser Ser 215 220 Glu Glu Val Gly Leu Arg Gly Gly Gln Thr Ala Thr Arg Ala Ile His 235 230 Pro Asp Ile Ala Leu Val Leu Asp Thr Ala Cys Trp Ser Lys Asn Phe 245 250 Asp Tyr Gly Ser Ala Asn His Arg Gln Ile Gly Ala Gly Pro Met Leu 265 Val Leu Tyr Asp Lys Thr Leu Ile Ala Pro Ala Lys Leu Ile Ala Leu 275 280 Ala Glu Thr Ile Ala Arg Ser Gln Gly Ile Pro Leu Gln Lys Asp Met 295 300 Phe Ser Asn Gly Gly Thr Asp Gly Gly Ala Ile His Leu Ser Gly Thr 310 315 Gly Val Pro Thr Leu Val Leu Gly Pro Pro Thr Arg His Gly His Cys 330 Ala Ala Ser Ile Ala Asp Glu Lys Asp Ile His His Thr Gln Gln Leu 345

<400> 9562

Leu Val Ala Leu Val Ala Gly Met Asn Arg Glu Thr Val Asp His Leu 355 360 Thr Asp Phe Arg Cys 370 <210> 9561 <211> 328 <212> PRT <213> Enterobacter cloacae <400> 9561 Leu Pro Ser Val Val Leu Gln Asp Gly Ile Thr Thr Ala Asn Ser Thr 10 His Ser Gly Arg Asn Met Ala Asn Leu Tyr Asp Leu Lys Lys Phe Asp Leu Asn Leu Leu Val Ile Phe Glu Cys Ile Tyr Gln His Leu Ser Ile Ser Arg Ala Ala Glu Thr Leu Tyr Ile Thr Pro Ser Ala Val Ser Gln Ser Leu Gln Arg Leu Arg Gly Gln Leu Asn Asp Pro Leu Phe Ile Arg 75 70 Ser Gly Lys Gly Ile Thr Pro Thr Thr Val Gly Thr Asn Leu His His 85 90 His Leu Glu Lys Asn Leu Asn Gln Leu Glu Gln Thr Ile Asn Met Met 100 105 His His Ser Asp Ile Lys Lys Phe Val Ile Tyr Cys Ser Gln Met 120 125 Val Ser Pro Gly Ser Met Leu Glu Pro Leu Lys Leu Leu Ile Ser Glu 135 140 Glu Asn Tyr Glu Ile Glu Gln Arg Asp Met Leu Ile Ser Ser Glu Ser 150 155 Ala Glu Asp Leu Leu Ala Tyr Arg Lys Ala Asp Leu Ile Phe Ser Ile 170 Ala Pro Ile His Asn Arg Ser Val Val Cys Thr His Phe Thr Thr Val Pro Ile Ala Leu Ile Cys Arg Ala Asp His Pro Arg Leu Ala Asp Ala 200 Val Thr Leu Glu Val Leu Tyr Gln Glu Lys Phe Thr Phe Tyr Gln Ser 215 Ala His Pro Gly Val Lys Glu Phe Gln Ser Arg Ala Asn Asp Ala Phe 230 235 Pro Glu Arg Asn Ile Ala Phe Arg Thr Asp Ser Leu Ser Ser Leu Ile 245 250 Ser Met Val Cys Ser Ser Asp Leu Leu Gly Phe Ile Pro Val Ser Ile 260 265 Tyr Glu Thr Tyr Lys Glu Pro Leu Lys Leu Lys Arg Leu Glu Pro Pro 280 Phe Glu Leu Pro Glu Leu Lys Ile Tyr Met Leu Tyr Ser Arg Ser Ser 295 300 Leu Asn Ser Thr Val Phe Ser Thr Phe Ile Glu Lys Met His Lys Leu 310 315 Cys Val Ser Pro Pro Ser Ala 325 <210> 9562 <211> 207 <212> PRT <213> Enterobacter cloacae

Lys Glu Met Thr Asp Asn Leu Gln Leu Thr His Leu Val Glu Ala Cys

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10
Arg Trp Ile Gly Ala Lys Gly Trp Ala Pro Ala Thr Gly Gly Asn Met
                                25
Ser Met Arg Gln Asp Glu His Leu Cys Trp Leu Ser Glu Ser Gly Lys
                            40
Asp Lys Gly Ser Leu Thr Thr Ala Asp Phe Leu Gln Val Glu Ile Ala
Thr Asn Arg Ala Pro Ser Gly Arg Lys Pro Ser Ala Glu Thr Gly Leu
                                        75
His Thr Leu Ile Tyr Arg Leu Phe Pro Glu Ala Asn Ala Val Leu His
                85
                                    90
Val His Thr Val Asn Ala Thr Val Leu Ser Arg Leu Val Asn Glu Ala
            100
                                105
Glu Leu Lys Ile Thr Gly Phe Glu Met Gln Lys Ser Leu Thr Gly Gln
                            120
        115
Thr Thr His Arg Asp Thr Val Ala Ile Pro Val Phe Asp Asn Asp Gln
                        135
                                            140
Asp Ile Asp Ala Leu Ala Ser Arg Ile Ala His Tyr Ala Gln Glu Arg
                    150
                                        155
Pro Leu Asn Tyr Gly Phe Leu Leu Arg Gly His Gly Leu Thr Cys Trp
                165
                                    170
Gly Arg Asp Val Ala Glu Ala Arg Arg His Leu Glu Gly Leu Glu Phe
            180
                                185
Leu Phe Glu Cys Glu Met Arg Leu Arg Gln Trp Glu Arg Val
                            200
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<210> 9563

<211> 437

<212> PRT

<213> Enterobacter cloacae

<400> 9563 Cys Leu His Val Val Asn Ser Leu Leu Arg Cys Cys Ser Thr Leu Cys Gln Asp Glu Ile Gln Met Tyr Arg Arg Leu His Val Leu Ile Ser Lys Thr Glu Glu Gln Ala Met Ser Gln Tyr Arg Thr Phe Thr Ala Gln Asp Ala Val Glu Tyr Ala Arg Gln Phe Gly Gly Leu Asp Asp Pro Ser Ser Leu Val Glu Ala Gln Glu Val Gly Asp Gly Asn Leu Asn Leu Val Phe Lys Ile Phe Asp Ser Ala Gly Val Ser Arg Ile Val Val Lys Gln Ala Leu Pro Tyr Val Arg Cys Val Gly Glu Ser Trp Pro Leu Thr Leu Asp 105 Arg Ala Arg Leu Glu Ala Gln Thr Leu Val Glu His Tyr Gln His Ser 115 120 125 Pro Gln His Thr Val Lys Ile His His Phe Asp Pro Glu Leu Ala Val 135 140 Met Val Met Glu Asp Leu Ser Ser His Arg Ile Trp Arg Gly Glu Leu 150 155 Ile Arg Asn Asn Tyr Tyr Pro Gln Ala Ala Arg Gln Leu Gly Glu Tyr 165 170 Leu Ala His Thr Leu Phe His Thr Ser Asp Phe Tyr Leu His Pro His 180 185 190 Glu Lys Lys Ala Gln Val Ala Lys Phe Ile Asn Pro Glu Met Cys Glu 200 205 Ile Thr Glu Asp Leu Phe Phe Asn Asp Pro Tyr Gln Ile His Ala Arg 215 220 Asn Ser Tyr Pro Ala Glu Leu Glu Asn Asp Val Ala Ala Leu Arg Asp

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230
                                        235
Asp Ala Gln Leu Lys Ile Ala Val Ala Ser Leu Lys His Arg Phe Phe
               245
                                    250
Ser His Ala Glu Ala Leu Leu His Gly Asp Ile His Ser Gly Ser Ile
            260
                                265
                                                    270
Phe Val Ala Asp Gly Ser Leu Lys Ala Ile Asp Ala Glu Phe Gly Tyr
                            280
Phe Gly Pro Ile Gly Phe Asp Val Gly Thr Ala Ile Gly Asn Leu Leu
                        295
Leu Asn Phe Cys Gly Leu Pro Gly His Leu Gly Ile Arg Asp Ala Ala
                    310
                                        315
Ala Ala Arg Glu Gln Arg Leu Thr Asp Ile Gln Glu Leu Trp Asn Thr
                                    330
                325
Phe Ala Glu Arg Phe Gln Val Leu Ala Asn Glu Lys Ala Arg Asp Ala
            340
                                345
Ala Leu Ser Ala Pro Gly Tyr Ala Ser Ala Phe Leu Lys Lys Val Trp
                            360
                                                 365
His Asp Ala Ile Gly Phe Cys Gly Thr Glu Leu Ile Arg Arg Ser Val
                        375
    370
                                            380
Gly Leu Ser His Val Ala Asp Ile Asp Thr Ile Gln Asp Glu Ala Met
                                        395
                    390
Arg His Glu Cys Leu Arg His Ala Ile Ser Leu Gly Lys Ala Leu Ile
                405
                                    410
Val Ile Ala Asp Arg Ile Asp Ser Ala Glu Glu Leu Val Ala Arg Val
            420
                                425
Arg Gln Tyr Ser
        435
<210> 9564
<211> 371
<212> PRT
<213> Enterobacter cloacae
<400> 9564
Arg Leu Leu Lys Lys Asp Asn Phe Met Ser Asn Thr Asp Ile Arg Val
                                    10
Val Pro Gly Pro Ala Asn Tyr Phe Ser His Pro Gly Ser Leu Ala His
                                25
Leu Asp Asn Phe Phe Thr Pro Glu Gln Leu Ser Arg Ala Val Trp Ile
Tyr Gly Glu Arg Ala Ile Glu Gly Ala Arg Pro Tyr Leu Pro Gln Ser
Phe Asn Ala Thr Gly Ala Lys His Leu Leu Phe Lys Gly His Cys Ser
                                        75
Glu Arg Asp Val Thr Arg Leu Val Asn Glu Ser Gly Ser Glu Thr Ser
                85
                                    90
Val Val Ile Gly Val Gly Gly Gly Ala Val Met Asp Thr Val Lys Ala
            100
                                105
                                                     110
Val Ala Arg Arg Leu Gly Val Pro Phe Val Gly Ile Pro Thr Ile Ala
                            120
                                                125
Ala Thr Cys Ala Ala Trp Thr Pro Leu Ser Val Trp Tyr Asn Asp Ala
                        135
                                            140
Gly Gln Ala Leu Gln Phe Glu Ile Phe Asp Asp Ala Asn Phe Leu Val
                    150
                                        155
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Leu Val Glu Pro Gln Ile Ile Leu Asn Ala Pro Ala Glu Tyr Leu Leu

Ala Gly Ile Gly Asp Thr Leu Ala Lys Trp Tyr Glu Ala Ala Val Leu
180 185 190

Ala Pro Gln Pro Glu Ser Leu Pro Leu Thr Val Arg Leu Gly Leu Asn
195 200 205

Gly Ala Leu Ala Ile Arg Asp Val Leu Leu Glu Arg Ser Glu Glu Ala

170

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215
                                            220
Leu Ala Asp Gln Gln Arg Gly Glu Gln Thr Gln Ala Phe Arg Asp Val
                                       235
                  230
Val Asp Ala Ile Ile Ala Gly Gly Gly Met Val Gly Gly Leu Gly Glu
                                   250
               245
Arg Tyr Thr Arg Val Ala Ala Ala His Ala Val His Asn Gly Leu Thr
                               265
            260
Val Leu Pro Gln Thr Glu Lys Tyr Leu His Gly Thr Lys Val Ala Tyr
                           280
                                                285
Gly Ile Leu Val Gln Ser Ala Leu Leu Gly Gln Asp Asp Val Leu Ala
                        295
                                            300
Gin Leu Val Ala Ala Tyr Arg Arg Phe Asn Leu Pro Ile Thr Leu Arg
                                        315
                   310
Glu Leu Asp Val Asp Ile His Asn Arg Asp Glu Leu Asp Lys Val Ile
               325
                            . 330
Gly His Thr Leu Arg Pro Val Glu Ser Ile His Tyr Leu Pro Val Thr
                                345
Leu Thr Pro Glu Val Leu Arg Ala Ala Phe Ala Lys Val Glu Ser Phe
                            360
Ser Arg
   370
<210> 9565
<211> 267
<212> PRT
<213> Enterobacter cloacae
<400> 9565
Leu Arg Arg Arg Ala Ile Pro Asn Asp Asp Ser Leu His Ser Cys Asn
                                    10
Glu Val Ile Met Gln Ile Asp Leu Ser Gly Lys Lys Ala Leu Val Thr
                                25
Gly Ala Ser Arg Gly Leu Gly Arg Ala Ile Ala Leu Ser Leu Ala Arg
Ala Gly Ala Asp Val Val Ile Thr Tyr Glu Lys Ser Val Asp Lys Ala
                        55
Gln Ala Val Ala Asp Glu Ile Lys Ala Leu Gly Arg His Gly Glu Ala
                    70
                                        75
Ile Gln Ala Asp Ser Ala Ser Ala Gln Ala Ile Gln Asp Ala Val Thr
                                    90
Gln Ala Ala Arg Ser Leu Gly Gly Leu Asp Ile Leu Val Asn Asn Ala
Gly Ile Ala Arg Gly Gly Pro Leu Glu Ser Met Thr Leu Ala Asp Ile
                            120
Asp Ala Leu Ile Asn Val Asn Ile Arg Gly Val Val Ile Ala Ile Gln
                        135
Glu Ala Leu Val His Met Ser Asp Gly Gly Arg Ile Ile Asn Ile Gly
                   150
                                        155
Ser Cys Leu Ala Asn Arg Val Ala Gln Pro Gly Ile Ala Val Tyr Ser
                                    170
               165
Met Thr Lys Ser Ala Leu Asn Ser Leu Thr Arg Gly Leu Ala Arg Asp
                                185
            180
Leu Gly Pro Arg Gly Ile Thr Val Asn Leu Val His Pro Gly Pro Thr
                            200
Asn Ser Asp Met Asn Pro Glu Asp Gly Glu Gln Ala Asp Ser Gln Arg
                        215
                                            220
Gln Leu Ile Ala Leu Gly His Tyr Gly Gln Pro Glu Asp Ile Ala Ala
                   230
                                       235
Ala Val Thr Phe Leu Ala Ser Pro Ala Ala Gly Gln Ile Ser Gly Thr
               245
                                    250
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Gly Leu Asp Val Asp Gly Gly Leu Asn Ala



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265
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<210> 9566
<211> 124
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<212> PRT

<213> Enterobacter cloacae

<400> 9566

Lys Phe Gly Ile Tyr Leu Ile Val Leu Leu Phe Pro Tyr Ile Leu Cys Gly Arg Thr Val Glu Val Arg Met Lys Ile Val Trp Ser Lys Thr Ala 25 Glu Lys Gln Phe Ser Lys Ile Asp Pro Arg Tyr Gln Asn Arg Ile Lys Phe Arg Leu Glu Lys Met Asp Asp Lys Thr Ser Pro Val Ala Asp Ile 55 Lys Lys Leu Ser Ser Pro Glu Asn His Tyr Arg Leu Arg Leu Gly Asp 75 Tyr Arg Val Ile Tyr Thr Phe Gly Asp Pro Pro Gly Asp Ile Cys Tyr 85 90 Val Val Ala Val Lys Arg Arg Thr Thr Thr Thr Tyr Leu His Glu Glu

100 105

His Thr Glu Tyr Asp Tyr Ser Val His Gln Gly 120

<210> 9567

<211> 297

<212> PRT

<213> Enterobacter cloacae

180

195

<400> 9567

Tyr Pro Lys Ser Ala Cys Gly Arg Phe Leu Cys Phe Asn Asn Pro Gln Lys Leu Ile Ala Pro Asn Gln Ser Gly Lys Gln Met Phe Arg Lys Asp 20 Ile Val Ile Pro Ser Gly Ala Val Ala Leu Ala Leu Cys Val Phe Ser 40 45 Ile Gln Ala Asp Pro Leu Lys Pro Thr Gln Tyr Gly Asp Phe Asp Arg 55 Tyr Val Leu Ala Leu Ser Trp Gln Thr Gly Phe Cys Gln Ser Met Val Glu Arg Asn Arg Asp Glu Pro Glu Glu Cys Arg Leu Gln Lys Glu Ser 90 Ser Asn Lys Thr Asp Phe Leu Thr Val His Gly Leu Trp Pro Ala Leu 105 Pro Lys Ser Ile Ala Ala Arg Gly Val Asp Glu Arg Arg Trp Met Arg 120 125 Phe Gly Cys Ala Thr Arg Pro Val Pro Asn Met Pro Glu Ala Lys Ala 135 140 Ser Arg Lys Cys Asp Ala Ala Glu Thr Gly Leu Ser Leu Thr Gly Ala 150 155 Ala Lys Leu Asn Ser Val Met Pro Gly Ala Gly Gly Asn Ser Cys Leu 165 170

Glu Arg Tyr Glu Tyr Ala Lys His Gly Val Cys Phe Gly Phe Asp Pro

Arg Ser Asp Phe Asp Ala Ala Val Ala Lys Ser Trp Gly Lys Gln Ser

200 Ser Ala Ala Gly Lys Phe Leu Ala Glu Asn Tyr Gly Lys Ser Val Arg

215

230

185 Asp Ala Tyr Phe Gly Thr Met Val Arg Met Asn Gln Glu Val Lys His

220

<210> 9568 <211> 149 <212> PRT

<213> Enterobacter cloacae

<400> 9568

Phe Arg Arg Pro Thr Pro Gly Val Leu Leu Gly Tyr Asp Lys Asp Leu Ser Cys Arg Arg Ala Lys His Ala Ala Gly Gly Thr Pro Leu Tyr Ala 20 Val Tyr Gln Ile Val Leu Ala Ala Gln Gln Ala Ala Ile Asp Ala Ile 40 Arg Pro Gly Val Ser Cys His Gln Ile Asp Ser Ala Val Arg Ser Val 55 Ile Glu Arg Ala Gly Tyr Gly Pro Gln Phe Gly His Asn Thr Gly His 70 75 Ala Ile Gly Ile Asp Val His Glu Asn Pro Arg Phe Ser Pro Thr Asp 85 90 Arg Thr Pro Leu Gln Pro Gly Met Val Leu Thr Val Glu Pro Gly Ile 100 105 Tyr Leu Glu His Leu Gly Gly Val Arg Ile Glu Asp Val Val Leu Val 120 Thr Glu Thr Gly Ala Glu Val Leu Tyr Thr Phe Asp Lys Arg Leu Leu 135 Leu Thr Gly Glu

145

<210> 9569 <211> 819 <212> PRT

<213> Enterobacter cloacae

<400> 9569

Arg Thr Ser Asp Ala Asp Leu Thr Arg Pro Gly Gly Ser Met Leu Ser Ile Glu Phe Phe Cys Pro Leu Pro Asn Gly Leu His Ala Arg Pro Ala Trp Ala Leu Lys Glu Gln Cys Ser Ala Trp Arg Ser Asp Ile Arg Phe 40 Ile Asn Arg Arg Leu His Thr His Ala Asp Ala Lys Ser Ser Leu Ala 55 Leu Ile Ser Thr Gly Thr Leu Phe Asn Asp Ser Cys Val Leu Glu Ile 70 75 Asn Gly Ser Asp Glu Glu Gln Ala Arg Arg Val Leu Glu Ala Tyr Leu 85 90 Thr Gly Ala Phe Ile Asp Ser Asp Ser Ile Pro Ser Gly Asp Ala Pro 105 100 110 His Val Ala His Pro Leu Pro Arg Ser Leu Val Arg Leu Ala Pro His 120 125 Leu Gln His Gly Ile Thr Leu Ala Ser Gly Ile Gly Ala Gly Thr Leu 135 140 Arg Gly Trp Gln Ser Asp Asn Leu Lys Arg Tyr Cys Gln Ile Pro Ala

			•												
145					150					155					160
Ser	Pro	Glu	Asp	Ile 165	Thr	Arg	Leu	Glu	His 170	Ser	Leu	Ala	Thr	Leu 175	Ala
Glu	Gln	Leu	Asn 180	Tyr	Arg	Leu	Arg	Gly 185	Leu	Asp	Gly	Glu	Ser 190	Lys	Thr
Ile	Leu	Ser 195	Ala	His	Leu	Ser	Leu 200	Ile	Gln	Asp	Glu	Glu 205	Phe	Gly	Gly
Thr	Ile 210	Arg	Arg	Leu	Ile	Ala 215	Glu	Glu	Arg	Leu	Ser 220	Leu	Ala	Glu	Ala
Ile 225	Ile	Arg	Asn	Met	Glu 230	Leu	Ile	Cys	Asp	Lys 235	Leu	Ser	Leu	Ser	Ala 240
Ser	Asp	Tyr	Leu	Arg 245	Glu	Arg	Val	Ser	Asp 250	Ile	Arg	Asp	Ile	Ser 255	Glu
Gln	Leu	Leu	Asn 260	Ile	Thr	Trp	Pro	Glu 265	Leu	Gln	Gln	Thr	Ser 270	Ala	Phe
Thr	Leu	Ser 275	Ala	Pro	Thr	Ile	Leu 280	Val	Ala	Glu	Asp	Leu 285	Thr	Pro	Ser
Gln	Phe 290	Leu	Ser	Leu	Asp	Thr 295	Gln	Tyr	Leu	Lys	Gly 300	Met	Val	Leu	Glu
305	Thr	•			310					315		_			320
	Pro			325	_				330					335	
_	Lys		340			_	_	345	_				350		
	Asn	355				_	360	_				365	-		
	Arg 370					375					380				
385	Arg	_			390					395			_		400
	Glu			405				_	410			_		415	
	Arg		420					425					430		
	Glu	435				_	440					445			
_	Pro 450				_	455		_		_	460	_	_		
465	Tyr	ьeu	ASII	116	470	GIII	GIU	GIU	ASII	475	rne	ьeu	GIY	ıyı	480
	Val			485					490					495	
Arg.	Ala	Ile	Leu 500	Arg	Ala	Gly	Ala	Ser 505	Gly	Asn	Ala	Leu	Leu 510	Met	Ile
	Met	515					520					525			
	Asn 530					535					540				
Arg 545	Leu	Pro	Leu	Gly	Ile 550	Met	Val	Glu	Val	Pro 555	Ser	Val	Cys	Phe	Ile 560
Ile	Asp	His	Phe	Cys 565	Glu	Glu	Val	Asp	Phe 570	Phe	Ser	Ile	Gly	Ser 575	Asn
Asp	Met	Thr	Gln 580	Tyr	Leu	Tyr	Ala	Val 585	Asp	Arg	Asn	Asn	Pro 590	Arg	Val
	Gly	595	_				600					605			_
	Ile 610					615					620				
Gly 625	Glu	Leu	Gly	Gly	Glu 630	Gln	Arg	Tyr	Leu	Pro 635	Leu	Leu	Leu	Gly	Leu 640

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Gly Leu Asp Glu Phe Ser Met Ser Gly Pro Arg Ile Pro Ala Val Lys
                645
                                    650
Thr Gln Leu Arg Gln Leu Asp Met Ala Thr Cys Arg Ala Leu Ala Asp
            660
                                665
                                                     670
Lys Ala Cys Asp Ser Arg Ser Ala Glu Glu Ile Glu Ala Leu Leu Ala
                            680
        675
Asp Phe Thr Pro Glu Ala Pro Pro Arg Pro Leu Leu Ala Leu Glu Thr
                        695
                                             700
Ile Val Val Asn Glu Pro Leu Thr Ser Lys Glu Gln Val Leu Gln Phe
                    710
                                        715
Leu Cys Gly Asn Leu Ala Ile His Gly Arg Thr Gly Asn Pro Leu Glu
                725
                                     730
Leu Glu Glu Asp Leu Trp Gln Arg Glu Glu Ile Val Thr Thr Ala Val
                                745
            740
Gly Phe Gly Val Ala Ile Pro His Thr Lys Ser Gln Trp Ile Arg His
                            760
        755
                                                 765
Ser Ser Ile Ser Ile Ala Arg Leu Asp Lys Ala Ile Asp Trp Glu Ser
                        775
                                             780
Asp Leu Gly Asp Val Glu Leu Val Ile Met Leu Thr Leu Gly Ala Gln
                    790
                                         795
Glu Gly Ile Asn His Val Lys Val Phe Ser Pro Ala Gly Ala Glu Ala
                                    810
                805
Gly Gln
<210> 9570
<211> 142
<212> PRT
<213> Enterobacter cloacae
<400> 9570
Arg His Gly Val Lys Met Ser Arg Pro Thr Ile Ile Ile Asn Glu Leu
                                     10
Asp Ala Glu Arg Ile Asp Arg Leu Leu Glu Lys Pro Glu Phe Ala Ser
Leu Pro Val Ala Asp Ala Leu Asn Glu Glu Leu Asp Arg Ala Gln Met
Cys Thr Pro Glu Thr Met Pro His Asp Val Val Thr Met Asn Ser Gln
Val Lys Phe Arg Asn Leu Thr Thr Gly Glu Glu Leu Thr Arg Thr Leu
                    70
Val Tyr Pro Ala Gln Met Thr Asp Ser Ser Thr Gln Leu Ser Val Leu
Ala Pro Val Gly Ala Ala Leu Leu Gly Leu Arg Thr Gly Asp Thr Ile
                                105
                                                     110
            100
His Trp Glu Leu Pro Gly Gly Ala Ser Ala His Leu Glu Val Leu Glu
                            120
Leu Phe Tyr Gln Pro Glu Ala Ala Gly Asp Tyr Leu Arg
                        135
<210> 9571
<211> 228
<212> PRT
<213> Enterobacter cloacae
<400> 9571
Thr Leu Ser Ala Leu Gln Arg Gln Ser Glu Ser Lys Thr Gln Gly Met
                                    10
Gly Asp Phe Met Gln Gln Arg Ile Ile Thr Glu Met Glu Thr Tyr Leu
                                25
```

Gln Ala Leu Ser Glu Glu Glu Arg Ile Ala Ala Ile Asn Ala Phe Arg

```
40
                                                45
Gln Ala Leu His Glu Ile Ser Pro Phe Arg Asp Gln Pro Val Asp Cys
                        5.5
                                            60
Val Leu Trp Ile Lys Lys Thr Asn Ile Thr Ala Asn Asp Tyr Asn Pro
                    70
                                        75
Asn Asn Val Ala Pro Pro Glu Lys Arg Leu Leu Ser Lys Ser Leu Glu
                                    90
                85
Leu Asp Gly Phe Thr Gln Pro Ile Val Val Thr Glu Asn Ala Pro Gln
                                105
His Tyr Glu Ile Val Asp Gly Phe His Arg His Asp Ile Gly Ser Asn
                            120
Arg Ala Ile Leu Lys Arg Gln Leu Lys Gly Tyr Leu Pro Val Thr Cys
                        135
                                            140
Leu Arg Lys Ala Arg Gln Glu Lys Phe Asp Arg Met Ala Ala Thr Ile
                    150
                                        155
Arg His Asn Arg Ala Arg Gly Arg His Gln Ile Asn Ala Met Ser Glu
                165
                                    170
Ile Val Arg Glu Leu Val Leu Met Gly Trp Ser Glu Gln Lys Ile Gly
            180
                                185
Gln Glu Leu Gly Met Asp Ser Asp Glu Val Leu Arg Leu Lys Gln Ile
                            200
Asn Gly Leu Leu Glu Leu Phe Ala Asp Arg Arg Phe Ser Glu Ala Trp
   210
                        215
                                            220
Thr Val Lys
225
<210> 9572
<211> 194
<212> PRT
<213> Enterobacter cloacae
<400> 9572 ·
Glu Ala Gln Leu Arg Gln Asn Arg His His Gln His Asp Asp His Asn
Gly Arg His Leu Pro Gln Gln Ala Glu Arg Arg Arg Asn Gly Pro Phe
Arg His Val Ala Ala Arg Gln His His Val Leu Ser Asn Arg Pro Ala
Val Ala Val Gly His Arg His Ala Leu Aṣp Asp Lys Gln Ala Gly Lys
Gly Arg Glu His Val Arg Asn Ala Gln Asp Asp Asp Gln Lys Arg Val
Lys Gln Ala Asp Gln Arg Thr Glu Arg Glu Ser Asp Tyr Asn Arg Leu
Gly Gly Ala Glu Ala Val Pro Asp Glu Glu Arg Asn His Gln Arg Val
            100
                                105
Arg Gln Arg Arg Gly Gly Ser His Arg Glu Ile Glu Pro Ala Asp Gly
                            120
Gln Gly Asp Arg His Ala Asp Gly Asn His Arg His Asp Gly Asn Arg
                        135
                                            140
Ala Gln Asn Val Asn Asp Val Val Arg Ile Glu Glu Ala Val Arg Arg
                   150
                                        155
Gln Ala Lys Asn Gly His Gln Arg Asp Asp Gly Gln Gln His Ala Pro
               165
                                   170
Leu Val Glu Lys Ile Glu Asn Leu Leu Thr Ala Arg Arg Arg Ala
            180
                                185
His
```



## <212> PRT <213> Enterobacter cloacae

<400> 9573 Thr Met Glu Leu Leu Arg Arg Leu Arg Ala Trp Leu Ala Ala Glu Lys 10 Leu Asp Gly Val Leu Ile Ser Ser Arg Gln Asn Lys Gln Pro His Leu 25 Gly Ile Ser Thr Gly Ser Gly Tyr Val Leu Val Thr Gln Thr Ala Ala His Ile Leu Val Asp Phe Arg Tyr Tyr Ser Asp Ile Ala Ser Arg Ala 55 Ala Gly Tyr Glu Met His Leu Leu Asn Thr Glu Asn Pro Phe Ala Gln 75 Ala Val Asn Gln Ile Ile Ala Lys Glu Ala Leu Thr Arg Leu Gly Phe 90 8.5 Glu Gly Glu Tyr Val Ser Trp Gln Thr Gly Val Leu Trp Arg Asp Thr 100 105 Leu Asn Thr Ala Leu Cys Ser Thr Ser Leu Asp Ala Leu Arg Gln Ile 120 Lys Thr Ala Asp Glu Ile Asp Arg Ile Arg Ala Ala Cys Gly Ile Ala 135 Asp Arg Ala Ala Gln His Ile Arg Arg Phe Ile Gln Pro Gly Met Arg 150 155 Glu Arg Glu Val Ala Ala Glu Leu Glu Trp Phe Met Lys Gln Glu Gly 165 170 Ala Asp Lys Pro Ser Phe Asp Thr Ile Val Ala Ser Gly Pro Arg Gly 180 185 190 Ala Leu Pro His Gly Lys Ala Ser Asp Lys Val Ile Met Pro Gly Glu 200 Met Ile Thr Leu Asp Phe Gly Ala Gln His Gln Gly Tyr Cys Ser Asp 215 220 Met Thr Arg Thr Phe Leu Val Ala Gly Gln Asn Thr Pro Pro Glu Glu 230 His Leu Ser Met Arg Cys Thr Arg Ser Phe Trp Arg His Asn Arg Gln 245 250 Leu Leu Met Pro Ser Ala Pro Ala Phe Pro Val Ile Arg Ser Ile Ala 260 Pro Tyr Val Pro

275

<210> 9574 <211> 148

<212> PRT

<213> Enterobacter cloacae

<400> 9574

Gln Gly Glu Thr Val Met Tyr Gln Thr Ile Ile Met Pro Val Asp Val 1 5 10 15

Phe Glu Met Glu Leu Ser Asp Lys Ala Ile Arg His Ala Glu Phe Leu 20 25 30

Ala Gln Gln Asp Gly Ile Ile His Leu Leu His Val Leu Pro Gly Ser 35

Ala Ser Leu Ser Leu His Arg Phe Ala Ala Asp Val Arg Arg Phe Glu 50 60

Glu His Leu Gln His Glu Ala Glu Thr Arg Leu Gln Thr Met Val Gly 70 75 80

His Phe Ser Ile Asp Pro Ser Arg Ile Lys Thr His Val Arg Phe Gly 85

Ser Val Arg Asp Ala Val Asn Glu Leu Ala Gly Glu Leu Asn Ala Asp 100

```
Val Val Val Ile Gly Ser Arg Asn Pro Ser Ile Thr Thr His Leu Leu
                            120
Gly Ser Asn Ala Ser Ser Val Ile Arg His Thr His Ile Pro Val Met
                        135
Val Val Arg
<210> 9575
<211> 87
<212> PRT
<213> Enterobacter cloacae
<400> 9575
Pro Pro Val His Ser Ser Ala Arg Thr Arg Asp Val Asn Ser Cys Pro
                                    10
                                                        15
Ser Gly Glu Pro Ala Lys Arg Gly Pro Trp Ser Asp Pro Gly Leu Ala
                                25
                                                    30
Ile Arg Lys Glu Gly Leu Arg Thr Ala Ser Val Leu Ser Ser Leu Lys
       35
                            40
                                    \ 45
Val Thr Phe Gly Asp Ser Ser Ala Ile Ser Val Ser Ser Ala Leu Ile
                        55
Ser Ala Asp Phe Ala Leu Ser Ser Ser Val Ala Ile Ser Ser Thr Gly
                    70
                                        75
                                                            80
Leu Val Ser Phe Ser Arg
                85
<210> 9576
<211> 427
<212> PRT
<213> Enterobacter cloacae
<400> 9576
Phe His Asn Ile Val Leu Phe Phe Ser Arg His Leu Thr Arg Arg Thr
Arg Leu Ile Met Ser Ile Tyr Lys Ile Pro Leu Gln Glu Asn Val Leu
Asp Ala Ser Ala Glu Arg Ile Asp Trp Thr Leu Asn Asn Phe Ser Arg
                                                45
Val Cys Val Ser Phe Ser Gly Gly Lys Asp Ser Thr Val Met Leu His
                        55
Leu Val Ala Gln Lys Ala Arg Gln Leu Lys Arg Lys Ile Asp Val Ile
                                        75
Phe Leu Asp Trp Glu Ala Gln Phe Ser Ser Thr Ile Gln His Val Asp
                                    90
               8.5
Thr Met Arg Thr Leu Tyr Arg Asp Val Ile His Leu Phe Trp Trp Val
           100
                                105
                                                    110
Ala Leu Pro Leu Thr Thr Gln Asn Ala Leu Ser Gln Phe Gln Pro Glu
                            120
                                                125
Trp Gln Cys Trp Glu Pro Gly Thr Asn Trp Val Arg Gln Pro Pro Glu
                        135
                                            140
Asp Ala Ile Thr Asp Tyr His Tyr Phe Asp Phe Tyr Gln Gln Gly Met
                   150
                                        155
Thr Phe Glu Ala Phe Val Arg Glu Phe Ala Glu Trp Tyr Ala Gln Arg
               165
                                    170
Arg Pro Ala Ala Val Met Val Gly Ile Pro Ala Asp Glu Ser Tyr Asn
                                185
Arg Phe Leu Ala Ile Ala Ser Ala Arg Lys Gln Arg Phe Ser Asp Asp
                           200
Lys Pro Trp Thr Thr Val Ala Pro Gly Gly His Ala Trp Tyr Ile Tyr
                       215
                                            220
```

Pro Leu Tyr Asp Trp Lys Thr Ala Asp Ile Trp Thr Trp Phe Ala Lys

```
230
                                       235
Ser Lys Cys Cys Tyr Asn Pro Leu Tyr Asp Leu Met Tyr Lys Ala Gly
               245
                                   250
Val Pro Pro Arg Tyr Met Arg Ile Cys Glu Pro Phe Gly Pro Glu Gln
                                265
Arg Gln Gly Leu Trp Leu Tyr His Val Ile Glu Pro Glu Arg Trp Ala
                           280
Ala Met Cys Glu Arg Ala Cys Gly Val Arg Ser Gly Gly Ile Tyr Ala
                        295
                                            300
Gly His Asp Asn His Phe Tyr Gly His Arg Lys Ile Leu Lys Pro Asp
                    310
                                        315
His Leu Gly Trp Arg Glu Tyr Ala Met Leu Leu Asp Ser Met Pro
                                    330
                325
Gln Asn Thr Ala Glu His Tyr Arg Asn Lys Ile Ala Val Tyr Leu His
                                345
            340
Trp Tyr Gln Lys Arg Gly Met Asn Asp Ile Pro Asp Thr Gln Glu Gly
                            360
Asp Ile Gly Ala Lys Asp Ile Pro Ser Trp Arg Arg Ile Cys Lys Val
                        375
                                            380
Leu Leu Asn Asn Asp Tyr Trp Cys Arg Ala Leu Ser Phe Ser Pro Asn
                    390
                                        395
Lys Pro Lys His Tyr Gln Arg Tyr Ser Asp Arg Val Lys Ala Lys Arg
                                    410
Lys Glu Trp Gly Ile Leu Cys Asn Asn Glu
            420
```

<210> 9577

<211> 241

<212> PRT

<213> Enterobacter cloacae

<400> 9577

Met Arg Asn Ala Phe Thr Thr Met Gly Glu Ser Met Ile Arg Ala Ile 10 Val Thr Asp Ile Glu Gly Thr Thr Ser Asp Ile Arg Phe Val His Asp 25 Val Leu Phe Pro Tyr Ala Arg Glu Arg Leu Ala Ala Phe Val Thr Ala Gln Gln Tyr Ala Glu Pro Val Lys Ser Ile Leu Asp Asn Leu Arg Asp 55 60 Glu Ile Ser Ala Pro His Ala Ser Val Ser Asp Leu Ile Asn Val Leu 70 7.5 Phe Thr Phe Met Asp Glu Asp Arg Lys Ser Thr Ala Leu Lys Ala Leu 90 85 Gln Gly Ile Ile Trp Gln Asp Gly Tyr Val Asn Gly Asp Phe Thr Gly 105 100 His Leu Tyr Pro Asp Val Leu Pro Ala Leu Glu Lys Trp Lys Ala Gln 115 120 125 Gly Ile Asp Leu Tyr Val Tyr Ser Ser Gly Ser Val Ala Ala Gln Lys 135 140 Leu Leu Phe Gly Tyr Ser Asp Glu Gly Asp Ile Thr His Leu Phe Ser 150 Gly Tyr Phe Asp Thr His Ile Gly Ala Lys Arg Glu Val Gln Ser Tyr 165 170 Gln Asn Ile Ala Ala Gln Thr Gly Ile Ala Pro Ser Gln Ile Leu Phe 185 Leu Ser Asp Ile His Gln Glu Leu Asp Ala Ala Glu Gln Ala Gly Phe 200 Arg Thr Leu Gln Leu Ile Arg Gly Glu Asp Asp Gly Ala Ser His His 215 220 His Gln Ile His Gln Phe Asp Glu Ile Asn Pro Glu Gln Ile Pro Ser

<210> 9578 <211> 176

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<212> PRT
<213> Enterobacter cloacae
<400> 9578
Asn Cys Pro Ser Ala Gly Asp Cys Cys Asp Arg Ala Val Pro Gly Ile
Arg Cys Arg Gln Pro Tyr His Leu Ala Gly Tyr Arg Gly Gly Arg Arg
                                25
Leu His Ala Gly Gly Val Met Ile Trp Lys Arg His Leu Thr Leu Glu
                                                45
Glu Leu Asn Ala Thr Ser Leu Asn Thr Met Val Gly His Leu Gly Ile
                        55
                                            60
Val Tyr Thr Arg Leu Gly Asp Asp Thr Leu Glu Ala Glu Met Pro Val
                    70
                                        75
Asp Ala Arg Thr His Gln Pro Phe Gly Leu Leu His Gly Gly Ala Ser
                85
                                    90
Ala Ala Leu Ala Glu Thr Leu Gly Ser Met Ala Gly Phe Leu Met Thr
            100
                                105
Arg Asp Gly Gln Asn Val Val Gly Thr Glu Leu Asn Ala Thr His His
        115
                            120
Arg Ala Val Ser His Gly Lys Val Arg Gly Val Cys Gln Pro Leu His
                        135
                                            140
Leu Gly Arg Ser Ser Gln Ser Trp Glu Ile Val Val Phe Asp Glu Gln
                    150
                                        155
Gly Arg Arg Cys Cys Thr Cys Arg Leu Ser Thr Met Val Leu Gly
                165
                                    170
<210> 9579
<211> 548
<212> PRT
<213> Enterobacter cloacae
<400> 9579
Gln Ala Leu Thr Arg Cys Tyr Val Trp Thr Ser Gly Trp Leu Ile Ile
                                    10
Phe Arg Phe Ile Leu Cys Leu Phe Arg Arg Cys Gln Ser Thr Gly Ala
Val Lys Asn Ser Leu Asn Gln Lys Ser Asn Glu Gly Phe Thr Arg Met
                            40
Val Ser Ser Arg Leu Glu Met Arg Gly Ile Ser Leu Ala Phe Ser Gly
Phe Gln Ala Leu Ser Arg Val Asp Phe Thr Leu Asn Gly Gly Ser Val
                                        75
His Ala Leu Thr Gly Ala Asn Gly Ala Gly Lys Ser Thr Leu Met Ala
                                    90
Val Leu Cys Gly Thr His Asp His Tyr Glu Gly Glu Ile Cys Ile Asn
                               105
                                                    110
Asn Gln Pro Val Ser Ile Arg Glu Pro Leu Asp Ala Lys Arg Leu Gly
                            120
Ile His Leu Val Gln Gln Glu Val Asp Val Ala Leu Ile Pro Gly Leu
```

135

Ser Ile Ala Glu Asn Ile Met Leu Asp Gln Leu Ala Gln Pro Gly His

Arg Tyr Arg Trp Arg Asp Ile Arg Gln Gln Ala Arg Gln Ala Leu Ala

```
Gln Leu Asp Val Ser Leu Asp Val Arg Arg Ser Ile Asp Gly Cys Thr
                                185
Leu Ala Glu Lys Gln Gln Ile Leu Leu Ala Arg Ala Leu Ser His His
                            200
Cys Arg Phe Leu Ile Leu Asp Glu Pro Thr Ala Pro Leu Asp Ala His
                        215
                                     . 220
Glu Ser Glu Arg Leu Phe Ala Val Val Arg Arg Leu Gln Gln Gly
                    230
                                        235
Ile Gly Val Val Phe Ile Ser His Arg Ile His Glu Leu Lys Ala Ile
                245
                                    250
Cys Asp Thr Leu Thr Val Leu Arg Asp Gly Arg Leu Ile Glu Ser Gly
                                265
            260
Pro Met Ala Asp Leu Ser Gly Glu Ala Ile Val Glu Lys Met Leu Gly
                            280
His Glu Leu Ser Asp Ile Tyr Pro Pro Pro Arg Pro Pro His Gly Asp
                        295
                                            300
Glu Thr Leu Leu Arg Val Glu Gly Leu His Asp Asp Ala Leu Leu Lys
                    310
                                        315
Asp Ile Ser Leu His Leu Arg Lys Gly Glu Ile Leu Gly Ile Ala Gly
                                    330
Leu Ala Gly Ala Gly Lys Thr Glu Leu Cys Lys Ala Leu Phe Gly Ala
                                345
Ser Lys Ser Arg Val Ala Asn Gly Glu Leu Asn His Gln Asp Trp Lys
                            360
Pro Arg Asp Pro Ala Asp Ser Val Leu Arg Gly Leu Ala Leu Val Pro
                        375
Glu Glu Arg Arg Lys Glu Gly Ile Phe Ile Asp Glu Pro Val Ser Met
                    390
                                        395
Asn Leu Ala Val Cys Ala Asp Asn Ser Phe Ser Arg Trp Ser Leu Phe
                405
                                    410
·Gly His Arg Gln Ala Trp Arg Trp Ala Glu Glu Val Ile Ala Arg Val
                                425
Gly Val Arg Ala Arg Gly Pro Gly Gln Val Leu Arg Arg Leu Ser Gly
                            440
                                                445
Gly Asn Gln Gln Lys Val Ala Ile Gly Lys Trp Leu Arg Asn Asp Ala
                        455
                                            460
Ser Val Leu Ile Phe Asp Glu Pro Thr Lys Gly Val Asp Val Lys Ala
                    470
                                        475
Lys Thr Asp Leu Phe Gln Leu Ile Asp Gly Leu Ala Arg Glu Gly Lys
                485
                                    490
Gly Val Ile Tyr Ala Ser Gly Glu Phe Ala Glu Leu Val Gly Leu Cys
                                505
            500
Asp Arg Ile Cys Val Leu Trp Asp Gly Arg Ile Val Ala Glu Ile Ala
                            520
                                                525
Gly Ala Glu Ala Arg Glu Glu Thr Leu Leu Tyr Tyr Ser Thr Gly Gly
    530
                        535
Thr Ala Ser
545
<210> 9580
<211> 356
<212> PRT
<213> Enterobacter cloacae
<400> 9580
Lys Met Lys Lys Ile Ala Leu Ser Leu Val Ala Leu Gly Leu Phe Thr
Ala Leu Pro Gly Phe Ala Ala Thr Pro Ala Pro Leu Pro Ala Ala Ile
Ala Asn His Asp Gly Pro Ile Arg Ile Ala Val Ile Arg Asn Leu Gly
```

```
Ser Asp Asp Asn Thr Thr Gln Phe Val Ala Gly Ala Ile Gln Glu Gly
                        55
Lys Lys Leu Gly Phe Lys Val Ser Thr Phe Leu Ser Asn Gly Asp Asp
                    70
                                        75
Ala Lys Phe Gln Asp Phe Val Asn Gln Ala Ile Ser Gln Lys Tyr Asp
                                    90
Gly Ile Ile Leu Ser Gln Gly Arg Asp Pro Tyr Ser Thr Ala Leu Val
                                105
Lys Lys Ala Val Asp Ala Gly Ile Lys Val Ala Val Phe Asp Thr Ala
                            120
Val Asn Gly Glu Ile Pro Gly Val Thr Val Thr Gln Gln Asp Asp Ala
                        135
                                            140
Ser Leu Thr Asn Leu Ser Phe Gly Gln Leu Ala Lys Asp Phe Asn Gly
                    150
                                        155
Lys Ala Asn Ile Val Lys Leu Trp Val Ala Gly Phe Pro Pro Met Glu
                165
                                    170
Arg Arg Gln Ala Ala Tyr Lys Glu Leu Gln Lys Gln Tyr Pro Glu Ile
            180
                                185
Lys Glu Leu Glu Ser Ile Gly Ala Val Ser Ser Asp Val Gln Gly Asp
                            200
Thr Ala Asn Lys Val Gly Ala Ile Leu Ala Lys Tyr Pro Lys Gly Lys
                        215
                                            220
Ile Asp Ala Ile Trp Gly Thr Trp Asp Ala Phe Ser Gln Gly Ala Tyr
                    230
                                        235
Lys Ala Leu Lys Glu Asn Gly Arg Thr Glu Ile Lys Leu Tyr Ser Ile
                                    250
Asp Ile Ser Asn Gln Asp Leu Gln Leu Met Arg Glu Pro Gly Ser Pro
                                265
Trp Lys Val Ser Val Ala Val Asp Pro Lys Leu Ile Gly Ala Thr Asn
                            280
Val Arg Leu Ile Ala Asn Lys Ile Ala Gly Glu Ala Thr Pro Ala Thr
                        295
Tyr Asp Phe Lys Ala Ala Ala Ile Pro Gln Ala Leu Leu Thr Ala Gln
                                        315
                    310
Pro Gly Ala Val Asn Val Ala Ser Leu Gly Lys Ile Ile Pro Gly Trp
                325
                                    330
Gly Gln Thr Glu Asp Phe Ile Ala Pro Trp Phe Ala Thr Leu Glu Ala
                                345
Lys Asn Lys
       355
<210> 9581
<211> 361
<212> PRT
<213> Enterobacter cloacae
<400> 9581
Thr Ser Ile His Leu Asp Phe Ile Leu Thr Gln Cys Ala Thr Thr
                                    10
Gln Gln Gly Ile Asn Asp Met Gln Thr Leu Gln Thr Thr Ser Leu Arg
                                25
Val Ala Asn Asn Gln Leu Phe Ile Leu Asp Gln Gln Ala Leu Pro Gln
Glu Lys Arg Trp Val Asp Ala Ser Thr Val Glu Ala Leu Val Gly His
Ile His Ala Leu Arg Val Arg Gly Ala Pro Leu Ile Gly Leu Ser Ala
Ser Leu Leu Ala Leu Leu Ala Glu Asn Gly Lys Ser Arg Asp Glu
                                    90
```

Leu Ala Val Ala Leu Glu Thr Leu Arg Ala Ser Arg Pro Thr Ala Val

```
Asn Leu Met Asn Asn Leu Asp Arg Met Lys Leu Ala Leu Trp Glu Glu
                            120
Asp Phe Val Pro Ala Leu Val Ala Glu Ala Leu Arg Leu Ile Asp Glu
                       135
                                            140
Asp Lys Arg Leu Cys Asp Ala Ile Ala Lys Ala Gly Ser Ala Leu Val
                   150
                                        155
Lys Pro Gly Ser Arg Leu Leu Thr His Cys Asn Thr Gly Gly Leu Ala
                                   170
Thr Ala Gly Val Gly Thr Ala Leu Gly Val Ile Ala Arg Ala His Lys
                                185
Glu Gly Lys Val Ser Asn Val Trp Val Asp Glu Thr Arg Pro Leu Leu
                            200
Gln Gly Gly Arg Leu Thr Ala Trp Glu Leu Gly Glu Leu Gly Val Pro
                        215
                                            220
Tyr Gln Leu Ile Thr Asp Ser Met Ala Ala Ser Leu Met Ala Lys Gly
                    230
                                        235
Gln Val Asp Ala Val Trp Val Gly Ala Asp Arg Ile Ala Ala Asn Gly
                245
                                    250
Asp Val Ala Asn Lys Ile Gly Thr Tyr Ser Leu Ala Val Leu Ala Lys
            260
                                265
Phe His Gly Ile Pro Phe Tyr Val Ala Ala Pro Gln Thr Thr Leu Asp
                            280
        275
Pro Asp Cys Pro Asn Gly Asp Ala Ile Pro Ile Glu Gln Arg Ala Ala
                        295
                                            300
Ser Glu Val Thr Gly Val Ala Gly Ser Phe Gly Ala Val Gln Trp Ala
                    310
                                        315
Pro Gln Asn Ala Gln Val Tyr Asn Pro Ala Phe Asp Val Thr Pro Ala
                325
                                    330
Ser Leu Ile Ser Gly Trp Val Leu Asp Thr Gly Val Val Thr Pro Asp
            340
                                345
Glu Val Ala Glu Gly Lys Phe Ala
        355
```

<210> 9582 <211> 207 <212> PRT

<213> Enterobacter cloacae

<400> 9582

Pro Arg Trp Ile Lys Leu Val Thr Leu His Leu Asp Glu Asn Thr Glu 10 Glu Val Gln Met Ser Leu Ile Asn Thr Lys Ile Lys Pro Phe Lys Asn Gln Ala Phe Lys Asn Gly Glu Phe Ile Glu Val Thr Glu Lys Asp Ile Glu Gly Arg Trp Ser Val Phe Phe Phe Tyr Pro Ala Asp Phe Thr Phe 55 Val Cys Pro Thr Glu Leu Gly Asp Val Ala Asp His Tyr Glu Glu Leu 70 75 Gln Lys Leu Gly Val Asp Val Tyr Ser Val Ser Thr Asp Thr His Phe 90 Thr His Lys Ala Trp His Ser Ser Ser Glu Thr Ile Ala Lys Ile Lys 105 110 Tyr Ala Met Ile Gly Asp Pro Thr Gly Ala Leu Thr Arg Asn Phe Asp 120 125 Asn Met Arg Glu Asp Glu Gly Leu Ala Asp Arg Ala Thr Phe Val Val 135 140 Asp Pro Gln Gly Ile Ile Gln Ala Ile Glu Val Thr Ala Glu Gly Ile 150 · 155 Gly Arg Asp Ala Ser Asp Leu Leu Arg Lys Val Lys Ala Ala Gln Tyr 170

Val Ala Ser His Pro Gly Glu Val Cys Pro Ala Lys Trp Lys Glu Gly 185 180 Glu Ala Thr Leu Ala Pro Ser Leu Asp Leu Val Gly Lys Ile 200 <210> 9583 <211> 244 <212> PRT <213> Enterobacter cloacae <400> 9583 Ile Phe Gly Asn Lys Pro Gly Val Pro Ile His Ala Glu Arg Lys Phe 10 Arg Tyr Ala Gly Lys Thr Glu Pro Gly Gln Cys Ala Leu Gln Pro Gln 20 25 Arg Arg Glu Ser Asp Met Tyr Phe Tyr Gln Pro Ser Gln Gly His Gly 35 40 45 Leu Pro His Asp Pro Leu Asn Ala Ile Ile Gly Pro Arg Pro Ile Gly Trp Ile Ser Ser Cys Asp Arg Ala Gly Gln Leu Asn Leu Ala Pro Tyr 70 Ser Phe Phe Asn Cys Phe Asn Tyr Arg Pro Pro Ile Ile Gly Phe Ser 85 90 Ser Asn Gly Trp Lys Asp Ser Val Arg Asn Ile Thr Glu Thr Gly Glu 100 105 Phe Val Trp Asn Leu Ala Thr Arg Asp Leu Ala Glu Ala Met Asn Glu 120 Thr Ser Ala Thr Leu Pro His Gly Glu Asp Glu Phe Thr Phe Ala Gly 135 Leu Thr Pro Val Ala Ser Gln Leu Val Ser Ser Pro Arg Val Ala Glu 150 155 Ser Pro Val Asn Phe Glu Cys Arg Leu Ser Gln Cys Ile Gln Leu Thr 170 Gly Ala Asp Gly Thr Pro Ile Asp Thr Trp Leu Val Leu Gly Glu Val 180 185 Val Gly Val His Ile Ala Glu Ser Leu Leu Glu Glu Gly Ile Tyr Gln 200 Thr Ala Lys Ala Gln Pro Ile Leu Arg Ala Gly Gly Pro Thr Ala Tyr 215 220 Tyr Ala Ile Ser Asp Ser His Arg Phe Asp Leu Val Arg Pro Asp Ala 230 Arg Arg Gly <210> 9584 <211> 532 <212> PRT <213> Enterobacter cloacae <400> 9584 Arg Tyr Gly Trp Arg Asp Val Gln Arg Gly Ser Ala Thr Val Pro Val 10 Lys Thr Ser Gly Gln Gly Leu Arg Arg Cys Phe Pro Leu Tyr Ala 25 Gly Gly Gly Ser Thr Asp Ala Ala Gln Ala Arg Thr His Cys Pro Gly 40 Ala Asn Ala Gly Gly Ala Val Ser Gly Cys Ala Asn Gly Val Ala Ala 55

Thr Ala Gly Arg Gly Thr Thr Val Ala Ala Ser Thr Ala Gly Gly Thr

Asp Gly Ala Ile Ser Leu Trp Thr Val Gly Ala Ser Gly Pro Ala Gly

<212> PRT

85 90 Gly Ala Ser Trp Arg Thr Gly Tyr Gly Thr Gly Gly Glu Pro Gly Gly 105 Ala Arg Asn Gly Ala Asn Leu Gly Cys Arg Glu Leu Ala Asp Pro Ala 120 Gly Ala Gly Ala Met Lys Lys Thr Thr Leu Met Ala Ile Ala Ile Ala 135 140 Ile Ala Ala Ala Gly Gly Tyr Phe Val Gly Gln Lys Gln Thr His Gln 150 155 Pro Ala Ala Ala Gln Pro Ser Glu Arg Lys Val Leu Tyr Trp Tyr 170 165 Asp Pro Met Val Pro Gly Gln Arg Phe Asp Lys Pro Gly Lys Ser Pro 1.80 185 190 Phe Met Asp Met Asp Leu Val Pro Arg Tyr Ala Asp Glu Ala Gln Ala 200 205 Ala Ser Gly Val Ala Ile Ser Thr Gln Gln Gln Asn Leu Gly Met 215 220 Lys Thr Ala Asn Val Glu Met Arg Gln Leu Val Ser Pro Phe Ser Ala 230 235 Phe Ala Thr Val Ala Thr Asp Glu Arg Asn Val Ser Val Val Ser Ala 245 250 Pro Ala Asn Gly Val Val Ser Lys Leu Phe Val Asn Ala Pro Gln Gln 260 . 265 270 Gln Val Lys Ala Gly Glu Ala Leu Ala Gln Leu Trp Ile Pro Gln Trp 275 280 Thr Thr Ala Gln Gln Glu Tyr Leu Ala Val Arg Gln Leu Gly Asp Ala 295 Ala Leu Thr Arg Ala Ala Arg Glu Arg Leu Ala Leu Gln Phe Met Pro 310 Glu Glu Val Ile Arg Leu Leu Glu Arg Ser Gly Lys Pro Gln Thr Thr 325 330 Leu Ile Leu Arg Ala Asp Gln Ala Gly Tyr Val Val Lys Leu Asp Val 345 Arg Glu Gly Ala Gln Ile Thr Ala Thr Ala Pro Leu Phe Glu Ile Ala 360 Arg Leu Asp Pro Val Trp Leu Val Val Asp Tyr Pro Gln Thr Gln Ala 375 Gln Ser Leu Ala Val Gly Ser Asn Val Val Ala Thr Ser Glu Ser Trp 390 395 Pro Gly Glu Gln Phe His Gly Thr Val Ser Glu Leu Pro Gln Met 410 Glu Thr Thr Arg Thr Leu Lys Ala Arg Ile Val Leu Glu Asn Ser 420 425 Ala His Lys Leu Lys Pro Gly Met Tyr Leu Ser Val Arg Arg Ala Glu 440 435 445 Glu Met Lys Gly Pro Pro Val Leu Ala Val Pro Glu Glu Ala Val Ile 455 460 Asn Ser Gly Glu Ser Ala Arg Leu Leu Leu Ala Thr Gly Asp Gly Tyr 470 475 Phe Arg Pro Val Thr Val Thr Gly Leu Thr Ala Gln Gly Trp Thr 485 490 Ala Ile Leu Ser Gly Val Lys Gln Gly Asp Lys Val Val Thr Ser Gly 500 505 Gln Phe Leu Ile Asp Ser Glu Ala Ser Leu Arg Ser Val Met Pro Glu 515 520 Val Thr Pro 530 <210> 9585 <211> 332

## <213> Enterobacter cloacae

<400> 9585 Ile Ser Gln Ala Gly Ala Arg Arg Gly Lys Tyr Gly Ala Asp Ala Gly 10 Asp Pro Arg Arg Cys Arg Ala Ala Arg Ala Ser Glu Gly Asp Asp Gly 25 Arg His Tyr Tyr Gly Arg Thr Ala Ala His His Val Gly Glu Trp Glu Trp Leu Gly Gly Asp Ala Thr Tyr Cys Arg Ala Asp Asp Trp Trp His 55 Gly Asn Gly Thr Val Ile Val Asp Val Ser Tyr Ser Arg Thr Leu Gln 75 Ile Val Thr Ser Thr Leu Asn Met Ser Thr Ala Cys Ala Tyr Ser Gly 8.5 Met Gln Phe Met Tyr Pro Gln Ile Ile Pro Arg Asn Gly Met Val Ile 105 Arg Asn Asn Thr His Ala Val Lys Arg Ser Phe Lys Tyr Ser Val Leu 125 120 Arg Ser Ala Pro Asn Thr Lys Tyr Gly Asn Gly Ile Val Ile Val Arg 135 Ile Lys Phe Pro Leu Ile Leu Leu Phe Ile Ile Gly Gln Leu Ser Cys 150 155 Ala Phe Ala Val Asn Ala Asp Ser Asn Thr Ala Asp Lys Gly Trp Phe 165 170 175 Thr Thr Phe Thr Asp Asn Val Ala Gln Thr Trp Asn Glu Pro Glu His 180 185 Tyr Asp Leu Tyr Ile Pro Ala Ile Thr Trp His Ala Arg Phe Ala Tyr 200 205 Asp Lys Glu Lys Thr Asp Arg Tyr Asn Glu Arg Pro Trp Gly Ala Gly 215 220 Phe Gly Gln Ser Arg Trp Asp Glu Lys Gly Asn Trp His Gly Leu Tyr 230 235 Leu Met Ala Phe Lys Asp Ser Tyr Asn Lys Trp Glu Pro Ile Gly Gly 250 Tyr Gly Trp Glu Lys Thr Trp Arg Pro Leu Ser Asp Asp Asn Phe Arg Leu Gly Leu Gly Tyr Thr Ala Gly Phe Thr Ala Arg Asp Asn Trp Lys 280 Tyr Ile Pro Val Pro Val Leu Leu Pro Leu Ala Ser Ile Gly Tyr Gly 295 Pro Ala Thr Phe Gln Met Thr Tyr Ile Pro Gly Thr Tyr Asn Asn Gly 310 315 Asn Val Tyr Phe Ala Trp Met Arg Phe Gln Phe

<210> 9586

<211> 436

<212> PRT

<213> Enterobacter cloacae

## <400> 9586

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70
                                        75
Phe Ala Arg Phe Ser Glu Pro Ala Val Gly Gly Asp Asp Pro Ala Gly
                85
                                    90
Pro Phe Gln Gln Lys Leu Ala Gln Ala Phe Arg Asn Ala Lys Asn Ser
                                105
Gly Ile Ala His Pro Val Met Val Gly Ala Ile Pro Phe Asp Thr Arg
                            120
Lys Pro Ser Ser Leu Phe Ile Pro Gln Arg Trp Gln Thr Phe Ser Arg
                        135
                                            140
Pro Ala Arg Gln Gln Ser Ala Arg Tyr Ala Ser Gly Ala Gln Thr Leu
                    150
                                        155
Asn Val Gln Gln Arg Thr Glu Ile Pro Pro Gln Pro Ile Phe Glu Glu
                                    170
                165
Met Val Ala Arg Ala Ala Ser Leu Thr Ala Thr Pro Gln Val Asn Lys
            180
                                185
Val Val Leu Ser Arg Leu Ile Asp Ile Ala Thr Asp Lys Gln Ile Asp
                            200
                                                 205
Ser Ser Ala Leu Met Glu Arg Leu Ile Ala Gln Asn Pro Ala Ser Phe
                        215
                                            220
Asn Phe His Val Pro Leu Glu Asp Gly Gly Val Leu Leu Gly Ala Ser
                    230
                                        235
Pro Glu Leu Leu Arg Lys Glu Gly Ala His Phe Ser Ser Leu Pro
                                    250
                245
Leu Ala Gly Ser Ala Arg Arg Gln Pro Asp Asp Val Leu Asp Arg Glu
                                265
                                                     270
Ala Gly Thr Lys Leu Leu Ala Ser Glu Lys Asp Arg His Glu His Asp
                            280
Leu Val Thr Gln Ala Met Lys Thr Ile Leu Glu Pro Arg Ser His His
                        295
Leu Ser Met Pro Ala Ser Pro Gln Leu Ile Thr Thr Pro Thr Leu Trp
                    310
                                         315
His Leu Ala Thr Pro Val Glu Gly Asp Ala Arg Glu Asn Glu Asn Ala
                325
                                     330
Leu Thr Leu Ala Cys Leu Leu His Pro Thr Pro Ala Leu Ser Gly Phe
                                345
Pro His Gln Ala Ala Lys Glu Leu Ile Ala Glu Leu Glu Pro Phe Asp
                            360
                                                 365
Arg Glu Leu Phe Gly Gly Ile Val Gly Trp Cys Asp Ser Glu Gly Asn
                        375
                                            380
Gly Glu Trp Val Val Thr Ile Arg Cys Ala Arg Leu His Gln Asn Thr
                    390
                                        395
Val Arg Leu Phe Ala Gly Ala Gly Ile Val Pro Ala Ser Ser Pro Val
                405
                                    410
Gly Glu Trp Arg Glu Thr Gly Val Lys Leu Ser Thr Met Leu Asn Val
            420
                                425
Phe Gly Leu His
        435
<210> 9587
<211> 540
<212> PRT
<213> Enterobacter cloacae
<400> 9587
Gly Ile Leu Met Thr Ile Pro Phe Thr Arg Trp Pro Glu Asp Phe Ala
Arg Arg Tyr Arg Glu Lys Gly Tyr Trp Gln Asp Leu Pro Leu Thr His
Ile Leu Thr Asp His Ala Asp Ser Asp Ala Val Ala Ile Ile Asp Gly
```

Asp Arg Arg Ile Thr Tyr Arg Ala Phe Asn Gln Ala Val Thr Asn Leu

	50					55					60				
Ala 65	Ser	Ala	Leu	Gln	Ala 70	Gln	Gly	Leu	His	Arg 75	Gly	Glu	Thr	Ala	Leu 80
Val	Gln	Leu	Gly	Asn· 85	Val	Ala	Glu	Phe	Tyr 90	Ile	Thr	Phe	Phe	Ala 95	Leu
Leu	Gln	Ile	Gly 100	Val	Ala	Pro	Val	Asn 105	Ala	Leu	Phe	Ser	His 110	Gln	Arg
Ser	Glu	Leu 115	Asn	Ala	Tyr	Ala	Glu 120	Gln	Ile	Lys	Pro	Ala 125	Val	Leu	Ile
Ala	Asp 130	Arg	Asp	His	Ala	Leu 135	Phe	Ser	Gly	Asp	Asp 140	Phe	Leu	Asn	Thr
Phe 145	Val	Asp	Ala	His	Arg 150	Ser	Val	Arg	Val	Val 155	Leu	Leu	Arg	Gly	Asp 160
Lys	Gly	Glu	His	Ala 165	Leu	Glu	Ala	Ala	Ile 170	Ser	Arg	Pro	Ala	Asp 175	Asn
			180	•				185				Phe	190		
Ser	Gly	Gly 195	Ser	Thr	Gly	Thr	Pro 200	Lys	Leu	Ile	Pro	Arg 205	Thr	His	Asn
_	210	_	_			215	_				220	Cys	_		
225			_	_	230					235		His		_	240
				245					250			Gly		255	
			260					265				Pro	270		
		275					280					Ala 285			
	290					295					300	Gln			
305					310					315		Ala			320
				325					330			Gln		335	
			340					345				Asp	350		
_		355				_	360			_	•	Asp 365	_		
_	370		_		_	375					380	Gly			_
385					390					395		Tyr			400
				405				_	410		_	Phe	_	415	
_	_		420			_		425	_	_		Thr	430		_
		435					440					11e 445			
	450					455					460	Ile			
465					470					475		Ser			480
			_	485			_		490			Arg	_	495	
_			500					505			_	Arg	510		
		515					520				val	Asp 525	гÀ2	ьys	GTU
ьeu	530	ьeu	тр	ьeu	нта	535	Arg	мта	Arg	стА	540				

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<210> 9588
<211> 274
<212> PRT
<213> Enterobacter cloacae
<400> 9588
Phe Arg Asp Ala Gly Lys Lys Ser Asp Pro Arg Cys Leu Val Gly Ala
Ala Leu Pro Arg Gly Glu Val Met Ala Phe Asp Phe Thr Gly Lys Thr
Val Trp Val Thr Gly Ala Gly Lys Gly Ile Gly Tyr Ala Thr Ala Leu
                            40
Ala Phe Val Glu Ala Gly Ala Gln Val Thr Gly Phe Asp Leu Ala Phe
                        55
Pro His Gly Glu Tyr Pro Phe Ala Thr Glu Thr Leu Asp Val Ala Asp
                                        75
Ala Ala Gln Ala Ser Asp Val Cys Gly Arg Leu Leu Ser Ser Leu Glu
                                    90
Arg Leu Asp Val Leu Val Asn Ala Ala Gly Ile Leu Arg Met Gly Ala
            100
                                105
Thr Asp Gln Leu Ser Pro Glu Asp Trp Gln Gln Thr Phe Ala Val Asn
                            120
Val Gly Gly Ala Phe Asn Leu Phe Gln Gln Thr Met Gly Gln Phe Arg
                        135
Arg Gln Gln Gly Gly Ala Ile Val Thr Val Ala Ser Asp Ala Ala His
                    150
                                        155
Thr Pro Arg Ile Gly Met Ser Ala Tyr Gly Ala Ser Lys Ala Ala Leu
                165
                                    170
Lys Ser Leu Ala Leu Thr Val Gly Leu Glu Leu Ala Gly Ser Gly Val
                                185
Arg Cys Asn Leu Val Ser Pro Gly Ser Thr Asp Thr Asp Met Gln Arg
                            200
                                                 205
Thr Leu Trp Thr Ser Asp Asp Ala Glu Gln Arg Arg Ile Arg Gly Phe
                        215
Gly Glu Gln Phe Lys Leu Gly Ile Pro Leu Gly Lys Ile Ala Arg Pro
                    230
                                        235
Gln Glu Ile Ala Ala Thr Val Leu Phe Leu Ala Ser Asp Ala Ala Ser
His Ile Thr Leu Gln Asp Ile Val Val Asp Gly Gly Ser Thr Leu Gly
Ala
<210> 9589
<211> 366
<212> PRT
<213> Enterobacter cloacae
<400> 9589
Ile Ser Ser Val Asp Cys His Ser Ala Phe Ser Leu Pro Ala Arg Met
                                    10
Gly His Arg Leu Ile Pro Gly Trp Cys Ser Ala Lys Ser Trp Ala Ser
            20
                                25
Ile Ser Pro Arg Val Cys Trp Lys Arg Gly Phe Thr Arg Pro Arg Lys
                            40
Arg Ser Pro Phe Cys Val Arg Val Asp Arg Arg Pro Thr Met Pro Ser
                        55
Val Ile Ala Ile Ala Ser Thr Trp Tyr Ala Arg Met Arg Ala Gly Gly
                    70
```

Asn Met Arg Ala Thr Leu Leu Pro Ala Asp Gln Gln Phe Phe Ala Asp

```
85
                                    90
Leu Leu Ser Gly Leu Val Leu Asn Pro Gln Gln Leu Gly Arg Val Trp
            100
                               105
Phe Ala His Arg Gly Ala Ser Asp Ala Val Gly Ser Val Ser Arg Asp
                            120
Trp Pro Arg Leu Asp Val Val Leu Arg Gly Glu Tyr Gly Asn Arg Leu
                        135
                                            140
Val Ala Gly Gln Gln Pro Leu His Gln Gly Glu Met Leu Phe Leu Pro
                    150
                                        155
Ala Gln Ala Ser Val Pro Val Phe Glu Arg Pro Val Met Leu Leu
                                    170
                165
Ser Ile Leu Phe Ala Pro Ser Trp Leu Gly Leu Val Phe His Asp Thr
                                185
            180
Arg His Gly Arg Ser Val Pro Ala Gln Arg His Val Glu Leu Pro His
                            200
                                                 205
Pro Glu Arg Gly Glu Cys Ala Ala Met Leu Met Ala Leu Thr His Leu
                        215
                                            220
Ser Ala Ser Pro Gln Asp Gln Ala Ile Ile Gln Pro Leu Val Leu Ser
                    230
                                        235
Leu Leu His Trp Cys Arg Lys Val Val Ser Ser Leu Pro Glu Pro Gly
                245
                                    250
Val Ser Arg Gly Asp Phe Leu Tyr Gln Ser Ile Cys Asn Trp Val Gln
            260
                                265
                                                     270
Glu Asn Tyr Ala Glu Pro Leu Ser Arg Asp Ser Val Ala Ser Leu Phe
        275
                            280
Asn Ile Ser Ala Asn His Leu Ser Arg Leu Phe Ser Gln Gln Gly Thr
                        295
                                             300
Met Ser Phe Val Asp Tyr Val Arg Trp Val Arg Met Ala Lys Ala Arg
                    310
                                        315
Thr Ile Leu Gln Lys Tyr His Leu Pro Val Gly Glu Val Ala Lys Arg
                                    330
                325
Cys Gly Tyr Ala Asp Ser Asp Tyr Phe Ser Arg Leu Phe Arg Arg Gln
                                345
Phe Gly Leu Thr Pro Gly Glu Tyr Arg Ala Arg Phe Gln
```

<210> 9590

<211> 435

<212> PRT

<213> Enterobacter cloacae

<400> 9590

Arg Phe Gln Asp Tyr Leu Ala Asp Ala Ser Thr Leu Ser Glu Val Thr 10 Met Lys Gln His Thr Leu Ser Leu Trp Leu Gly Gly Val Leu Phe Gly 20 25 Leu Leu Thr Ser Ala Ala Gln Ala Glu Pro Trp Thr Leu Glu His Thr 40 45 Leu Thr Glu Ala Gln Arg Tyr Ser Ala Glu Leu Ser Ala Ser Arg Asn 55 60 Glu Ala Gln Ala Leu Asp Ala Met Ala Val Ser Ala Thr Gln Leu Pro 70 75 Asp Pro Lys Leu Lys Phe Gly Ile Glu Asn Val Pro Val Gln Gly Ser 90 Asn Asp Arg Arg Leu Thr Arg Glu Gly Met Thr Met Gln Lys Val Gly 105 Ile Met Gln Ser Tyr Val Ser Ser Glu Lys Arg Glu Arg Lys Ala Gln 120 Thr Leu Gln Ala Gln Ala Arg Ser Val Leu Ala Lys Ser Glu Ala Val 135 Arg Ala Ala Leu Gln Arg Asp Thr Ala Gln Ala Trp Leu Asp Leu Ala

155

```
Leu Ala Gln Gln Ala Leu Asn Thr Ala Arg Thr Leu Val Arg Glu Thr
               165
                                   170
Glu Arg Gln Arg Gly Val Gln Lys Ala Ser Val Gly Ala Gly Ser Ala
            180
                                185
                                                    190
Met Pro Asp Ser Val Leu Ala Leu Gln Met Ile Leu Ser Ala Met Arq
                            200
Asp Lys Glu Thr Leu Ala Gln Arg Asp Val Gln Leu Ala Gln Ser Arg
                        215
Leu Leu Glu Leu Thr Gly His Ala Ile Thr Glu Val Arg Gly Pro Leu
                    230
                                        235
Pro Arg Tyr Gln Arg Leu Pro Ala Asn Glu Lys Thr Leu Gln Glu Gly
                                    250
                245
Ile Val Arg His Pro Glu Val Glu Ala Ala Arg Arg Glu Ala Glu Thr
            260
                                265
Ala Lys Ala Arg Ser Ala Gln Ser Ala Val Ala Ala Ile Pro Asp Val
                            280
Asp Val Glu Val Tyr Tyr Ala His Arg Ala Glu Gly Tyr Asp Asp Met
    290
                        295
                                            300
Ala Gly Val Met Phe Ser Val Asp Leu Pro Leu Phe Gln Ser Lys Arg
                    310
                                        315
Gln Asp Lys Asp Tyr Ala Ala Asp Val Ser Arg Ser Met Gln Ala Ala
                325
                                    330
Asp Gln Leu Thr Leu Leu Lys Arg Glu His Ile Ala Gln Val Gln Thr
            340
                                345
Leu Val Ala Gln Tyr Gln Ala Ala Gln Thr Val Trp Gln Arg Gln Arg
                            360
                                                 365
Asp Glu Val Leu Pro Leu Gln Arg Gln Arg Leu Ala Val Leu Thr Ala
                        375
                                            380
Gln Tyr Arg Ser Gly Gln Ser Ala Leu Pro Ala Leu Leu Glu Ala Arg
                    390
                                        395
Arg Gly Val Leu Asp Thr Glu Leu Ala Val Asn Gln Ala Glu Arg Glu
                                    410
Met Ala Arg Thr Trp Ala Ala Val Asn Trp Leu Ile Pro Gln Glu Leu
            420
Ala Gln
        435
<210> 9591
<211> 708
<212> PRT
<213> Enterobacter cloacae
<400> 9591
Gly Leu Gly Gln Asn Ala Asp Ala Gln Ala Arg Arg Val Cys Arg
                                    10
Gly Gly Thr Gly Val Cys Ala Val Pro Val Pro Pro Ala Leu Arg Ala
                                25
Gly Gly Asp Gly Leu Ser Ala Ala Gly Asp Pro Arg Gly Phe Cys Gly
                            40
                                                45
Asp Ala Leu Ser Gly His Asn Ala Asn Met Met Ser Leu Gly Gly Ile
                        55
                                            60
Ala Ile Ala Ile Gly Ala Met Val Asp Ala Ile Val Met Ile Glu
                    70
                                        75
Asn Met His Lys Val Leu Glu Leu Trp Arg His Asp Asn Pro Gly Lys
                85
                                    90
Glu Pro Ala Pro Gly Glu Tyr Trp Arg Leu Ala Glu Lys Ala Ala Val
                                105
Glu Val Gly Pro Ala Leu Phe Cys Ser Leu Leu Ile Ile Thr Leu Ser
                            120
Phe Ile Pro Val Phe Ser Leu Glu Ala Gln Glu Gly Arg Met Phe Ser
```

135 140 Pro Leu Ala Phe Thr Lys Thr Trp Ser Met Ala Val Ala Ala Gly Leu 150 155 Gly Ile Thr Leu Val Pro Val Leu Met Gly Phe Phe Ile Arg Gly Lys 165 170 175 Ile Pro Asp Glu Lys Ala Asn Pro Ile Asn Arg Leu Leu Ile Arg Leu 180 185 Tyr Glu Pro Leu Leu Asp Lys Val Leu Thr Phe Pro Lys Thr Thr Leu 200 Ala Leu Ala Cys Leu Leu Leu Ile Ala Thr Leu Trp Pro Leu Ser Arg 215 Leu Gly Ser Glu Phe Met Pro Pro Leu Asp Glu Gly Asp Leu Leu Tyr 230 235 Met Pro Ser Thr Leu Pro Gly Ile Ser Ala Arg Glu Ala Ser Arg Leu 245 250 Leu Gln Gln Thr Asp Arg Leu Ile Lys Ser Val Pro Glu Val Ala Ser 260 265 Val Phe Gly Lys Ala Gly Arg Ala Glu Ser Ala Thr Asp Pro Ala Pro 275 280 285 Leu Thr Met Leu Glu Thr Thr Ile His Phe Lys Pro Arg Glu Gln Trp 295 300 Arg Pro Gly Met Thr Pro Gln Lys Leu Val Glu Glu Leu Asp Lys Thr 310 315 Val Ser Leu Pro Gly Ile Ala Asn Val Trp Val Pro Pro Val Arg Asn 325 330 Arg Leu Asp Met Leu Ala Thr Gly Ile Lys Ser Pro Val Gly Ile Lys 340 345 350 Val Asn Gly Asn Asn Ile Ala Asp Ile Glu Arg Val Ala Arg Gln Ile 355 360 365 Glu Gln Val Val Lys Asp Val Pro Gly Val Ser Ser Ala Leu Ala Glu 375 380 Arg Leu Glu Gly Gly Arg Tyr Val Asp Ile Arg Ile Asp Arg Gln Lys 390 395 Ala Ala Arg Tyr Gly Val Ser Val Asp Glu Leu Gln Ser Leu Val Ser 405 410 Thr Leu Val Gly Gly Asp Asn Ile Gly Glu Val Ile Gln Gly Arg Glu 420 425 Arg Tyr Pro Ile Asn Leu Arg Tyr Pro Arg Asp Leu Arg Asp Asn Val 440 Asp Ala Leu Arg Val Leu Pro Val Val Thr Ala Ser Gly Ser Gln Val 455 Ala Leu Gly Glu Leu Ala Asp Ile Val Val Thr Glu Gly Pro Pro Met 470 475 Leu Lys Ser Glu Asn Ala Arg Leu Ser Ser Trp Ile Tyr Val Asp Leu 490 Arg Gly Arg Asp Leu Lys Ser Ala Val Asp Glu Met Gln Lys Arg Val 500 505 510 Glu Glu Lys Val Val Leu Pro Gln Gly Val Ser Leu Ser Trp Ser Gly 515 520 Gln Phe Glu Tyr Leu Glu Arg Ala Thr Ala Arg Leu Lys Ile Val Leu 535 540 Pro Val Thr Leu Met Ile Ile Phe Val Leu Leu Trp Leu Thr Phe Arg 550 555 Arg Ile Ser Asn Val Leu Ile Ile Met Gly Ala Leu Pro Phe Ala Leu 565 570 Ile Gly Gly Val Trp Leu Leu Trp Leu Leu Glu Tyr Asn Leu Ser Val 585 580 Ala Gly Ala Val Gly Phe Ile Ala Leu Ser Gly Val Ala Ala Glu Phe 600 605 Gly Val Ile Met Val Leu Tyr Leu Asn His Ala Ile Asp Lys Tyr His 615

Arg Leu Glu Pro Glu Gly Gly Asn Thr Val Leu Met Arg Ala Ile His 630 635 Glu Gly Ala Val Leu Arg Val Arg Pro Lys Val Met Thr Val Ala Thr 650 645 Ile Met Ala Gly Leu Leu Pro Ile Met Trp Gly Ser Gly Ser Gly Ser 660 665 670 Glu Val Met Gln Arg Ile Ala Ala Pro Met Ile Gly Gly Met Val Thr 680 685 Ala Pro Leu Ser Met Leu Val Ile Pro Ala Leu Tyr Lys Leu Leu 695 His Gln Arg 705 <210> 9592 <211> 345 <212> PRT <213> Enterobacter cloacae <400> 9592 Asn Ser Pro Cys Ala Arg Trp Arg Cys Asp Ala Ser Cys Ala Ser Arg 10 Ala Leu Pro Asn Leu Ser Cys Arg Thr Ala Trp Arg Ala Trp Met Arg 20 Phe Arg Ser Arg Arg Ser Ala Lys Leu Ile Arg Asn Ser Cys Ala Cys 40 Gly Leu Leu Asn Ala Pro Gly Ala Glu Glu Gln Arg Met Ala Ile Pro 55 Lys Leu Thr Ala Tyr Ala Leu Pro Thr Ala Ala Glu Leu Pro Thr Ser 70 75 Lys Val Asn Trp Ala Phe Glu Pro Glu Arg Ala Ala Leu Leu Ile His 8.5 90 Asp Met Gln Glu Tyr Phe Leu Asn Phe Trp Gly Glu Asn Ser Asp Met 100 105 Met Gln Gln Val Val Ala Asn Ile Ala Lys Leu Arg Ala Tyr Cys Lys 120 Glu His Asn Ile Pro Val Tyr Tyr Thr Ala Gln Pro Lys Asp Gln Ser 135 140 Asp Glu Asp Arg Ala Leu Leu Asn Asp Met Trp Gly Pro Gly Leu Thr 150 155 Arg Ser Pro Glu Gln Gln Arg Ile Val Ala Glu Leu Thr Pro Asp Glu 170 Ala Asp Thr Val Leu Val Lys Trp Arg Tyr Ser Ala Phe His Arg Ser 185 Pro Leu Glu Gln Met Leu Lys Glu Thr Gly Arg Asn Gln Leu Leu Ile 200 Thr Gly Val Tyr Ala His Ile Gly Cys Met Thr Thr Ala Thr Asp Ala 215 Phe Met Arg Asp Ile Lys Pro Phe Phe Ile Ala Asp Ala Leu Ala Asp 230 Phe Thr Arg Asp Glu His Leu Met Ser Leu Lys Tyr Val Ala Gly Arg 245 250 Ser Gly Arg Val Val Met Thr Asp Glu Leu Leu Pro Ser Val Pro Ala 265 260 Thr Lys Ala Ala Leu Arg Glu Leu Ile Leu Pro Leu Leu Asp Glu Ser 280 285 Asp Glu Pro Met Asp Asp Glu Asn Leu Ile Asp Tyr Gly Leu Asp Ser 295 300 Val Arg Met Met Ala Leu Ala Ala Arg Trp Arg Lys Val His Gly Asp 310 315 Ile Asp Phe Val Met Leu Ala Lys Asn Pro Thr Leu Asp Ala Trp Trp

330

Ala Leu Leu Ser Arg Glu Val Lys 340 345

<210> 9593 <211> 713 <212> PRT

<213> Enterobacter cloacae

His Leu Thr Val Ser Gln Gln Arg Thr Thr Thr Met Asn Asn Ser Gly Lys Tyr Leu Thr Trp Ala Val Leu Ser Val Val Gly Ala Phe Ala Leu 25 Gly Tyr Ile Ala Leu Asn Arg Gly Glu Gln Ile Asn Ala Leu Trp Ile 40 Val Val Ala Ser Val Cys Ile Tyr Leu Ile Ala Tyr Arg Phe Tyr Gly 55 Arg Tyr Ile Ala Lys Thr Val Leu Gly Val Asp Gly Thr Arg Met Thr 70 75 Pro Ala Val Arg His Asn Asp Gly Leu Asp Tyr Val Pro Thr Asp Lys 90 85 Lys Val Leu Phe Gly His His Phe Ala Ala Ile Ala Gly Ala Gly Pro 100 105 Leu Val Gly Pro Val Leu Ala Ala Gln Met Gly Tyr Leu Pro Gly Met 115 120 Ile Trp Ile Leu Ala Gly Val Val Leu Ala Gly Ala Val Gln Asp Phe 135 140 Met Val Leu Phe Val Ser Thr Arg Arg Asp Gly Arg Ser Leu Gly Glu 150 155 Leu Val Lys Glu Glu Met Gly Ala Thr Ala Gly Val Ile Ala Leu Val 165 170 Ala Thr Phe Met Ile Met Val Ile Ile Leu Ala Val Leu Ala Met Ile 180 185 190 Val Val Lys Ala Leu Thr His Ser Pro Trp Gly Thr Tyr Thr Val Ala 200 205 Phe Thr Ile Pro Leu Ala Leu Phe Met Gly Ile Tyr Ile Arg Tyr Leu 220 215 Arg Pro Gly Arg Ile Gly Glu Val Ser Val Ile Gly Leu Val Phe Leu 230 235 Val Phe Ala Ile Ile Ser Gly Gly Trp Val Ala Glu Ser Pro Thr Trp 250 Ala Pro Phe Phe Asp Phe Thr Gly Val Gln Leu Thr Trp Met Leu Val 265 Gly Tyr Gly Phe Val Ala Ala Val Leu Pro Val Trp Leu Leu Ala 280 Pro Arg Asp Tyr Leu Ser Thr Phe Leu Lys Ile Gly Thr Ile Val Gly 295 300 Leu Ala Ile Gly Ile Leu Ile Met Arg Pro Thr Leu Thr Met Pro Ala 310 315 Leu Thr Lys Phe Ile Asp Gly Thr Gly Pro Val Trp Thr Gly Asn Leu 330 325 Phe Pro Phe Leu Phe Ile Thr Ile Ala Cys Gly Ala Val Ser Gly Phe 345 His Ala Leu Ile Ala Ser Gly Thr Thr Pro Lys Met Leu Ala Asn Glu 360 Asn Gln Ala Cys Leu Ile Gly Tyr Gly Gly Met Leu Met Glu Ser Phe 375 380 Val Ala Ile Met Ala Leu Val Ser Ala Cys Ile Ile Asp Pro Gly Val

Tyr Phe Ala Met Asn Ser Pro Met Ala Val Leu Ala Pro Ala Gly Thr

395

410

390

```
Val Asp Val Val Ala Ser Ala Ala Gln Val Val Ser Gly Trp Gly Phe
           420
                               425
Ala Ile Thr Pro Glu Thr Leu Thr His Ile Ala Asn Glu Val Gly Glu
                            440
Gln Ser Ile Ile Ser Arg Ala Gly Gly Ala Pro Thr Leu Ala Val Gly
                        455
                                            460
Met Ala Tyr Ile Leu His Gly Ala Leu Gly Gly Leu Met Asp Val Ser
                    470
                                        475
Phe Trp Tyr His Phe Ala Ile Leu Phe Glu Ala Leu Phe Ile Leu Thr
                                    490
Ala Val Asp Ala Gly Thr Arg Ala Ala Arg Phe Met Leu Gln Asp Leu
                                505
Leu Gly Val Ile Ser Pro Asn Leu Lys Arg Thr Asp Ser Leu Pro Ala
                            520
                                                525
Asn Leu Leu Ala Thr Ala Leu Cys Val Leu Ala Trp Gly Tyr Phe Leu
                        535
                                            540
His Gln Gly Val Val Asp Pro Leu Gly Gly Ile Asn Thr Leu Trp Pro
                    550
                                        555
Leu Phe Gly Ile Ala Asn Gln Met Leu Ala Gly Met Ala Leu Met Leu
                                    570
                565
Cys Ala Val Val Leu Phe Lys Met Lys Arg Gln Arg Tyr Ala Trp Val
            580
                                585
                                                    590
Ala Leu Val Pro Thr Ala Trp Leu Leu Ile Cys Thr Leu Thr Ala Gly
                            600
Trp Gln Lys Ala Phe Ser Pro Asp Asn Lys Val Gly Phe Leu Ala Ile
          •
                        615
                                            620
Ala Asn Lys Phe Gln Ala Met Ile Asp Ser Gly Lys Ile Pro Ala Gln
                    630
                                        635
Tyr Thr Glu Ser Gln Leu Ser Gln Leu Val Phe Asn Asn Arg Leu Asp
                645
                                    650
Ala Gly Leu Thr Ile Phe Phe Met Val Val Val Val Leu Ala Leu
                                665
Tyr Ser Leu Lys Thr Ala Leu Ala Ala Leu Lys Val Asp Lys Pro Thr
                            680
Ala Lys Glu Thr Pro Tyr Glu Pro Met Pro Glu Asn Leu Asp Glu Ile
                        695
Val Thr Gln Ala Lys Gly Ala His
                    710
<210> 9594
<211> 104
<212> PRT
<213> Enterobacter cloacae
<400> 9594
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<210> 9595

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<211> 345
<212> PRT
<213> Enterobacter cloacae
<400> 9595
Arg Asp Thr Thr Leu Leu Phe Asn Arg Arg Asn Gly Val Val Ser Lys
                                    10
Ala Leu Ser Val Ser Ala Ala Ala Ser Gly Arg Gln Gln Ile Phe Asp
Phe Leu Tyr Lys Trp Gly Met Leu Leu Thr Val Val Ala Leu Val Ala
                            40
Val Phe Gly Leu Ala Ser Asp Ser Phe Leu Asp Pro Asn Asn Ile Ile
                        55
Asn Ile Leu Arg Ser Ile Ala Ile Val Thr Val Ile Ala Ile Gly Val
                    70
                                        75
Ser Ile Ser Leu Thr Val Gly Gly Phe Asp Leu Ser Val Gly Ser Thr
                                    90
Ala Ser Leu Ala Asn Ala Leu Val Ile Ser Leu Phe Val Trp His Gly
            100
                                105
                                                     110
Phe Gly Thr Thr Glu Ser Ile Val Ile Thr Leu Ala Leu Cys Thr Leu
                            120
Val Gly Leu Phe Asn Ala Phe Leu Ile Val Ile Leu Arg Ile Pro Asp
                        135
                                            140
Met Leu Ala Thr Leu Ala Ser Leu Phe Val Ile Gln Gly Val Ala Met
                    150
                                        155
Thr Tyr Ser Tyr Gly Gly Ser Ile Thr Glu Asn Met Val Leu Pro Ser
                165
                                    170
Gly Asp Met Ala Glu Gly Thr Ile Pro Ala Ala Phe Ser Leu Leu Gly
                                185
Gln Val Pro Thr Ile Val Ile Val Met Leu Val Val Thr Ile Leu Ala
                            200
Gln Leu Gly Leu Ser Leu Thr Thr His Gly Arg Arg Met Tyr Ala Ile
                        215
                                             220
Gly Gly Asn Pro Glu Ala Ala Arg Leu Ser Gly Ile Arg Thr Thr Arg
                    230
                                        235
Tyr Lys Val Ala Ala Tyr Val Ile Ala Ser Leu Leu Ala Gly Leu Gly
                                    250
Gly Ile Leu Leu Ala Ser Arg Ile Gly Ser Ser Gln Val Asn Ala Gly
                                265
Gly Gly Tyr Leu Met Asp Ala Val Ala Ala Ala Trp Ile Gly Phe Ser
                            280
Leu Ala Gly Ser Gly Lys Pro Asn Ala Leu Gly Thr Leu Val Gly Ala
                        295
                                             300
Val Ile Leu Gly Val Leu Ser Asn Gly Leu Val Met Leu Ser Val Pro
                  . 310
                                        315
Tyr Tyr Ala Met Asp Ile Ile Lys Gly Leu Val Leu Ala Val Ala Leu
                                    330
                325
Ala Ile Thr Tyr Ile Gln Lys Arg
            340
<210> 9596
<211> 414
<212> PRT
<213> Enterobacter cloacae
<400> 9596
Thr Ser Lys Arg Leu Asp Cys Gln Arg Leu Thr Ser Cys Tyr Ser Val
                                    10
Ser Asn Ile Ser Ile Thr Gly Arg His Thr Thr Met Ser Asn Asn Pro
                                25
```

Leu Ile Pro Gln Ser Lys Leu Pro Asn Leu Gly Thr Thr Ile Phe Thr

40 Gln Met Ser Ala Leu Ala Gln Gln His Asn Ala Ile Asn Leu Ser Gln 55 60 Gly Phe Pro Asp Phe Asp Gly Pro Lys Tyr Leu Gln Glu Arg Leu Ala 70 75 Tyr His Val Ala Gln Gly Ala Asn Gln Tyr Ala Pro Met Thr Gly Val 85 90 Gln Thr Leu Arg Glu Ala Ile Ala Asp Lys Thr Ala Glu Leu Tyr Gly 105 His Lys Pro Asp Ala Asn Ser Asp Ile Thr Val Thr Ala Gly Ala Thr 120 Glu Ala Leu Tyr Ala Ala Ile Thr Ala Leu Val Arg Thr Gly Asp Glu 135 140 Val Ile Cys Phe Asp Pro Ser Tyr Asp Ser Tyr Ala Pro Ala Ile Glu 150 155 Leu Ala Gly Gly Val Val Lys Arg Val Ala Leu Gln Pro Pro His Phe 165 170 Arg Pro Asp Trp Gln Ala Phe Ala Ala Leu Leu Ser Asp Lys Thr Arg 180 185 190 Leu Val Ile Leu Asn Thr Pro His Asn Pro Ser Ala Thr Val Trp Gln 200 Lys Ala Asp Phe Ala Ala Leu Trp Gln Ala Ile Ala Glu Arg Glu Ile 220 210 215 Tyr Val Leu Ser Asp Glu Val Tyr Glu His Ile Cys Phe Ala Glu Glu 230 235 Gly His Ala Ser Val Leu Ala His Pro Gln Leu Arg Glu Arg Ala Ile 250 245 Ala Val Ser Ser Phe Gly Lys Thr Tyr His Met Thr Gly Trp Lys Val 260 265 Gly Tyr Cys Val Ala Pro Ala Ala Ile Ser Ala Glu Leu Arg Lys Val 275 280 His Gln Tyr Leu Thr Phe Ala Val Asn Thr Pro Ala Gln Leu Ala Leu 295 300 Ala Asp Met Leu Arg Ala Glu Pro Gly His Tyr Arg Glu Leu Pro His 310 315 Phe Tyr Arg Glu Arg Arg Asp Leu Phe Val Ala Ala Leu Ser Lys Ser 325 330 Arg Leu Glu Ile Leu Pro Ser Glu Gly Thr Tyr Phe Leu Leu Ala Asp 345 Tyr Ser Ala Ile Ser Asp Leu Asp Asp Val Ser Phe Cys Gln Leu Leu 360 Thr Lys Glu Val Gly Val Ala Ala Ile Pro Leu Ser Val Phe Cys Ala 375 Asp Pro Phe Pro His Lys Leu Ile Arg Leu Cys Phe Ala Lys Gln Glu 390 395 Ser Thr Leu Leu Ala Ala Ala Glu Arg Leu Ala Thr Leu

<210> 9597

<211> 535

<212> PRT

<213> Enterobacter cloacae

<400> 9597

Gly Gly Leu His Asp Asp Val Leu Arg Glu Gly Arg Ile Met Leu Asp 1 5 10 15

Thr Asn Met Lys Thr Gln Leu Lys Ala Tyr Leu Glu Lys Leu Thr Lys 20 25 . 30

Pro Val Glu Leu Ile Ala Thr Leu Asp Asp Ser Ala Lys Ser Ala Glu 35 40 45

Ile Lys Ala Leu Leu Thr Glu Ile Ala Glu Leu Ser Pro Lys Val Thr

55 60 Phe Lys Glu Asp Asn Thr Leu Ala Val Arg Lys Pro Ser Phe Leu Ile 75 70 Ala Asn Pro Gly Ser Asp Gln Gly Pro Arg Phe Ala Gly Ser Pro Leu 85 90 Gly His Glu Phe Thr Ser Leu Val Leu Ala Leu Leu Trp Thr Gly Gly 100 105 His Pro Ser Lys Glu Ala Gln Ala Leu Leu Glu Gln Ile Arg Asp Ile 120 Asp Gly Asp Phe Glu Phe Glu Thr Tyr Tyr Ser Leu Ser Cys His Asn 135 Cys Pro Asp Val Val Gln Ala Leu Asn Leu Met Ser Val Leu Asn Pro 150 155 Arg Ile Lys His Thr Ala Ile Asp Gly Gly Thr Phe Gln Asn Glu Ile 165 170 Thr Glu Arg Asn Val Met Gly Val Pro Ala Val Tyr Leu Asn Gly Gln 180 185 Glu Phe Gly Gln Gly Arg Met Thr Leu Thr Glu Ile Val Ala Lys Val 195 200 205 Asp Thr Gly Ala Glu Lys Arg Ala Ala Glu Glu Leu Asn Gln Arg Asp 215 220 Ala Tyr Asp Val Leu Ile Val Gly Ser Gly Pro Ala Gly Ala Ala Ala 230 235 Ala Val Tyr Ser Ala Arg Lys Gly Ile Arg Thr Gly Leu Met Gly Glu 245 250 Arg Phe Gly Gly Gln Val Leu Asp Thr Val Asp Ile Glu Asn Tyr Ile 260 265 Ser Val Pro Lys Thr Glu Gly Gln Lys Leu Ala Gly Ala Leu Lys Ala 280 275 His Val Ser Asp Tyr Asp Val Asp Val Ile Asp Ser Gln Ser Ala Ser 295 300 Lys Leu Val Pro Ala Ala Val Glu Gly Gly Leu His Gln Ile Glu Thr 310 315 Ala Ser Gly Ala Val Leu Lys Ala Arg Ser Val Ile Ile Ala Thr Gly 325 330 Ala Lys Trp Arg Asn Met Asn Val Pro Gly Glu Asp Gln Tyr Arg Thr 340 345 Lys Gly Val Thr Tyr Cys Pro His Cys Asp Gly Pro Leu Phe Lys Gly 360 Lys Arg Val Ala Val Ile Gly Gly Gly Asn Ser Gly Val Glu Ala Ala 375 Ile Asp Leu Ala Gly Ile Val Glu His Val Thr Leu Leu Glu Phe Ala 390 395 Pro Glu Met Lys Ala Asp Gln Val Leu Gln Asp Lys Val Arg Ser Leu 410 Asn Asn Val Asp Ile Val Leu Asn Ala Gln Thr Thr Glu Val Lys Gly 420 425 Asp Gly Ser Lys Val Thr Gly Leu Glu Tyr Arg Asp Arg Val Ser Gly 440 445 Asp Ile His Ser Val Ala Leu Ala Gly Ile Phe Val Gln Ile Gly Leu 455 460 Leu Pro Asn Thr Thr Trp Leu Glu Gly Ala Ile Glu Arg Asn Arg Met 470 475 Gly Glu Ile Ile Asp Ala Lys Cys Glu Thr Ser Val Lys Gly Val 490 485 Phe Ala Ala Gly Asp Cys Thr Thr Val Pro Tyr Lys Gln Ile Ile Ile 505 Ala Thr Gly Glu Gly Ala Lys Ala Ser Leu Ser Ser Phe Asp Tyr Leu 515 520 Ile Arg Thr Lys Thr Ala 535

Pro Gly Gly Val Val

420

<210> 9598 <211> 422 <212> PRT <213> Enterobacter cloacae <400> 9598 Ala Tyr Pro His Pro Phe Gly Gly Cys Met Lys Ala Leu Thr Tyr His Gly Pro His His Val Arg Val Asp Asn Val Pro Asp Pro Gly Ile Glu 25 Gln Pro Asp Asp Ile Ile Leu Arg Val Thr Ala Thr Ala Ile Cys Gly 40 Ser Asp Leu His Leu Tyr Arg Gly Lys Ile Pro Lys Val Gln His Gly 55 Asp Ile Phe Gly His Glu Phe Met Gly Glu Val Val Glu Cys Gly Ser 70 75 Glu Val Lys Asn Val Gln Lys Gly Asp Arg Val Val Ile Pro Phe Val 90 Ile Ala Cys Gly Asp Cys Phe Phe Cys Gln Met Gln Gln Tyr Ala Ala 105 100 Cys Glu Asn Thr Asn Arg Gly Gln Gly Ala Ala Leu Asn Lys Lys Gln 120 Ile Pro Ala Pro Ala Ala Leu Phe Gly Tyr Ser His Leu Tyr Gly Gly 135 140 Val Pro Gly Gly Gln Ala Glu Tyr Val Arg Val Pro Lys Gly Asn Val 150 155 Gly Pro Phe Lys Val Pro Gln Leu Leu Ser Asp Asp Lys Ala Leu Phe 165 170 Leu Ser Asp Ile Leu Pro Thr Ala Trp Gln Ala Ala Lys Asn Ala Gln 180 185 Ile Gln Arg Gly Ser Ser Val Ala Val Phe Gly Ala Gly Pro Val Gly 200 Leu Leu Thr Ile Ala Cys Ala Arg Leu Leu Gly Ala Glu Gln Ile Phe 215 Val Val Asp His His Pro Tyr Arg Leu Arg Phe Ala Gln Glu Arg Tyr 230 235 Gly Ala Ile Pro Ile Asn Phe Asp Asp Asp Asn Asp Ala Ala Glu Lys 250 Ile Ile Glu Gln Thr Ala Gly Gln Arg Gly Val Asp Ala Val Ile Asp 265 Ala Val Gly Phe Glu Ala Lys Gly Ser Thr Thr Glu Thr Ile Leu Ser 275 280 Asn Leu Lys Ile Glu Gly Ser Ser Gly Lys Ala Leu Arg Gln Cys Ile 295 Ala Ala Val Arg Arg Gly Gly Val Val Ser Val Pro Gly Val Tyr Ala 310 315 Gly Phe Ile His Gly Phe Leu Phe Gly Asp Ala Phe Asp Lys Gly Leu 325 330 Ser Phe Lys Met Gly Gln Thr His Val His Ala Trp Leu Gly Glu Leu 340 345 Leu Pro Leu Ile Glu Lys Gly Leu Leu Thr Pro Glu Asp Ile Val Thr 360 365 His Tyr Leu Pro Leu Ser Asp Ala Glu Arg Ala Tyr Lys Ile Phe Glu 375 380 Lys Arg Glu Glu Cys Arg Lys Val Ile Leu Val Pro Gly Ala Asp 390 395 Thr Pro Glu Ala Ala Gln Gln Lys Val Lys Gly Leu Val Asn Ala Phe 405 410

<210> 9599 <211> 78

```
<212> PRT
<213> Enterobacter cloacae
<400> 9599
Gly Thr Ala Arg Glu Phe Pro Val Asp Ser Ile Ala Cys Ala Gln Ser
Lys Gln Arg Arg Ala His Gly Cys Gln His Arg Gln Leu Arg Ala Ala
                                25
Val Gly His Leu Arg Arg Ile Asp Gln Arg Thr Gly Glu Leu Leu Ala
                            40
Gly Gly Gln Val Ala Glu Leu His Leu Ala Val His Gly Asp His Ile
                        55
Met Arg His Gly Leu Arg Arg Thr His Leu Arg Pro Val
<210> 9600
<211> 112
<212> PRT
<213> Enterobacter cloacae
<400> 9600
Phe Val Asp Phe Ile Tyr Leu Thr Phe Asn Arg Ser Phe Ile Met Arg
Thr Val Phe Leu Ser Ala Leu Val Gly Ala Ser Val Ser Phe Ala Ser
            20
Tyr Thr Ala Gln Ala Asn Gln Thr Trp Gln Gly Arg Gly Val Val Gln
                            40
Ser Ile Ser Asp Ser Ala Val Met Leu Arg His Glu Ala Ile Pro Glu
                        55
Leu Lys Trp Pro Ala Met Thr Met Pro Phe Thr Leu Ser Ala Gly Ala
Thr Leu Asn Gly Ala Lys Pro Gly Asp Glu Val Thr Phe Thr Leu Glu
                                     90
Arg Ala Gly Asp Gly Phe Lys Ile Ile Ser Leu Thr Pro Ala Arg
            100
                                105
<210> 9601
<211> 396
<212> PRT
<213> Enterobacter cloacae
<400> 9601
Arg Asp Ala Gly Gly Asp Ala Met Ile Ala Ala Val Ile Arg Ala Ser
                                    10
Leu Arg Asn Arg Leu Leu Val Ile Leu Ala Ala Leu Met Met Ala Gly
                                25
Trp Gly Trp Trp Ala Val Gln Arg Ala Pro Leu Asp Ala Leu Pro Asp
                            40
Leu Ser Asp Val Gln Val Ile Ile Lys Ala Ser Tyr Pro Gly Lys Ala
                                             60
                        55
Pro Gln Val Ile Glu Asp Gln Val Thr Trp Pro Leu Thr Thr Ser Met
                    70
                                        75
Leu Ser Val Pro Gly Ala Lys Thr Val Arg Gly Phe Ser Met Phe Gly
                                    90
Asp Ala Tyr Val Tyr Val Leu Phe Glu Asp Gly Thr Asp Leu Tyr Trp
            100
                                105
Ala Arg Ser Arg Val Leu Glu Tyr Leu Ser Gln Val Gln Ala Gln Phe
        115
                            120
```

```
Pro Pro Gly Val Lys Val Ser Leu Gly Pro Asp Ala Thr Gly Val Gly
                        135
                                            140
Trp Ile Tyr Glu Tyr Ala Leu Ile Asp Arg Ser Gly Lys His Ser Leu
                   150
                                       155
Ala Asp Leu Arg Ala Leu Gln Asp Trp Thr Leu Lys Phe Glu Leu Lys
               165
                                    170
Thr Val Pro Asn Val Ser Glu Val Ala Ser Ile Gly Gly Met Val Arg
                                185
Gln Tyr Gln Ile Val Ala Asp Pro Ala Lys Met Arg Ala Leu Asn Ile
                            200
Thr His Ser Gln Leu Ser Gly Ala Val Gln Ala Ala Asn Lys Glu Ser
                        215
                                            220
Gly Gly Ala Leu Leu Glu Met Gly Glu Ala Glu Tyr Met Val Arg Thr
                    230
                                        235
Thr Gly Tyr Leu Arg Ser Leu Glu Asp Phe Arg Asn Val Val Ile Ala
                245
                                    250
Thr Arg Asp Gly Val Pro Val Leu Leu Lys Asp Val Ala Thr Ile Gly
            260
                                265
Ile Gly Pro Glu Ile Arg Arg Ser Val Ala Glu Leu Asn Gly Glu Gly
                            280
                                                285
Glu Val Ala Gly Gly Val Ile Val Met Arg Tyr Gly Gln Asn Ala Leu
                        295
                                            300
Glu Thr Leu His Ala Val Lys Ala Lys Leu Ser Glu Leu Gln Lys Thr
                    310
                                        315
Leu Pro Gln Gly Val Glu Ile Val Pro Val Tyr Asp Arg Ser Thr Leu
                325
                                    330
Ile Glu Asp Ser Val Lys Thr Leu Thr His Lys Leu Leu Glu Glu Phe
            340
                                345
Ala Val Val Leu Val Cys Ala Leu Phe Leu Phe His Leu Arg Ser
                            360
        355
Ala Leu Val Ala Met Val Ser Leu Pro Leu Gly Ile Leu Gly Ala Phe
                        375
                                            380
Val Val Met His Tyr Gln Gly Ile Thr Arg Ile
                    390
<210> 9602
<211> 334
<212> PRT
```

<213> Enterobacter cloacae

## <400> 9602

Asn Ser Ser Arg Ile Thr Ser Pro Thr Pro Val Ser Ser Gly Ser Phe 10 Cys Asn Ile Arg Val Arg Ile Pro Ser Val Thr Thr Ser Ser Arg Val Asp Gly Pro Thr Gln Val Ser Ala Arg Ile Arg Tyr Pro Thr Val Ser Pro Gly Phe Ser Phe Ser Ser Ser Ala Arg Arg Cys Ala Thr Leu Arg 55 60 Ala Ala Ser Leu Arg Gly Ser Ser Arg Ile Ile Phe Pro Leu Met Phe 75 Pro Ser Arg Arg Ile Cys Arg Gly Ser Gln Val Asp Leu Pro Ala Pro 90 Val Gly Ala Leu Ser Lys Thr Cys Gly Ala Cys Ser Lys Ala Ala Ser 100 105 Ser Ser Gly Arg Thr Thr Ala Thr Gly Lys Glu Asp Thr Tyr Gly Ser 120 Arg Gly Leu Thr Leu Ile Gly Val His Cys Ser Ile Gly Ala Tyr His 135 140 Tyr Arg Val Leu Arg Met Ser Glu Ser Lys Arg Leu Phe Phe Ala Ile 150 155

Glu Leu Pro Thr Thr Leu Gln Arg Gln Ile Val Arg Trp Arg Ala Ser 165 170 His Phe Pro Ala Glu Ala Gly Arg Pro Val Val Ala Ala Asn Met His 180 185 Leu Thr Leu Ala Phe Leu Gly Glu Val Ser Ala Glu Lys Gln Arg Ala 200 205 Leu Ser Ala Met Ala Gly Arg Ile Ser Gln Pro Gly Phe Thr Leu His 215 220 Leu Asp Asp Ala Gly Gln Trp Leu Arg Ser Arg Val Val Trp Leu Gly 235 230 Thr Arg Gln Pro Pro Arg Gly Leu Leu Gln Leu Ala Asn Met Leu Arg 245 250 Ala Gln Ala Ala Arg Ser Gly Cys Tyr Gln Ser Pro Gln Pro Phe His 265 270 260 Pro His Ile Thr Leu Leu Arg Asp Ala Gly Gln Ala Val Ala Ile Pro 280 285 Pro Pro Gly Phe His Trp Ser Phe Gln Val Asn Glu Phe Ala Leu Tyr 295 300 Glu Ser Ala Phe Val Gln Gly Arg Thr Arg Tyr Thr Pro Leu Gln Arg 310 315 Trp Thr Leu Gly Asp Thr Leu Arg Asn Pro Asp Glu Val 325 330

<210> 9603

<211> 159

<212> PRT

<213> Enterobacter cloacae

<400> 9603

1 10 15 Ser Ser Leu Ser Ile Leu Ala Ile Ala Gly Val Glu Pro Tyr Gln Glu 30 Lys Pro Gly Glu Glu Tyr Met Asn Glu Ala Gln Leu Ser His Phe Lys 40 Arg Ile Leu Glu Ala Trp Arg Asn Gln Leu Arg Asp Glu Val Asp Arg Thr Val Thr His Met Gln Asp Glu Ala Ala Asn Phe Pro Asp Pro Val Asp Arg Ala Ala Gln Glu Glu Phe Ser Leu Glu Leu Arg Asn Arg Asp Arg Glu Arg Lys Leu Ile Lys Lys Ile Glu Lys Thr Leu Lys Lys 100 105 Val Glu Asp Glu Asp Phe Gly Tyr Cys Glu Ser Cys Gly Val Glu Ile 120 125 Gly Ile Arg Arg Leu Glu Ala Arg Pro Thr Ala Asp Leu Cys Ile Asp 135 140 Cys Lys Thr Leu Ala Glu Ile Arg Glu Lys Gln Met Ala Gly 150

Cys Val Leu Arg Arg Ser Asn Met Gln Glu Gly Gln Asn Arg Lys Thr

<210> 9604

<211> 301

<212> PRT

<213> Enterobacter cloacae

<400> 9604

Val Arg Arg Leu Ser Gly Arg Arg Thr Gln Phe Pro Leu Arg Ser Pro l 5 10 15 Gly Val Leu Ile Ile Glu Thr Leu Pro Leu Leu Arg Gln His Ile Arg 20 25 30 Arg Ala Arg Gln Glu Gly Lys Arg Ile Ala Leu Val Pro Thr Met Gly

```
40
Asn Leu His Asp Gly His Met Lys Leu Val Asp Glu Ala Arg Ala Arg
                        55
                                            60
Ala Asp Ile Val Val Val Ser Ile Phe Val Asn Pro Met Gln Phe Asp
                    70
                                        75
Arg Glu Asp Asp Leu Ala Arg Tyr Pro Arg Thr Leu Gln Glu Asp Cys
               85
                                    90
Glu Lys Leu Lys Lys Arg His Ala Asp Ile Val Phe Ala Pro Ala Pro
                                105
Ala Asp Val Tyr Pro Gln Gly Thr Thr Glu Ser Thr Tyr Val Asp Val
                            120
                                                125
Pro Gly Ile Ser Thr Met Leu Glu Gly Ala Ser Arg Pro Gly His Phe
                        135
                                            140
Arg Gly Val Ser Thr Ile Val Ser Lys Leu Phe Asn Leu Val Gln Pro
                    150
                                        155
Asp Ile Ala Cys Phe Gly Glu Lys Asp Phe Gln Gln Leu Ala Leu Ile
                165
                                    170
Arg Lys Met Val Ala Asp Met Gly Tyr Asp Ile Glu Ile Ile Gly Val
            180
                                185
Pro Ile Val Arg Ala Lys Asp Gly Leu Ala Leu Ser Ser Arg Asn Gly
                            200
Tyr Leu Thr Ala Glu Gln Arg Lys Ile Ala Pro Gly Leu Ser Lys Val
                                            220
   210
                        215
Met Asn Thr Met Ala Glu Gln Leu Leu Ala Lys Glu Leu Thr Ala Glu
                                        235
                    230
Glu Ile Ile Ala Leu Ala Glu Gln Ala Leu Asn Glu Lys Gly Leu Arg
                                    250
                245
Ala Asp Asp Val Gln Ile Arg Asp Ala Asp Thr Leu Leu Ala Leu Thr
            260
                                265
Glu Thr Ser Lys Arg Ala Val Ile Leu Val Ala Ala Trp Leu Gly Gln
                            280
Ala Arg Leu Ile Asp Asn Lys Val Val Glu Leu Ala
   290 .
                        295
```

<210> 9605

<211> 205

<212> PRT

<213> Enterobacter cloacae

<400> 9605

Lys Met Ser Phe Asn Lys Leu Gly Leu Ala Thr Val Val Ala Met Val Leu Ser Ala Gly Ser Ala Met Ala Ala Asp Ile Pro Ser Asp Thr Gly 25 Thr Ile Thr Phe His Gly Met Val Ser Asn Asn Thr Cys Lys Val Ser 40 Leu Asp Gln Lys Ile Asp Gln Asp Gly Asn Asp Phe Asp Val Asn Leu 55 Asp Thr Val Phe Val Lys Asp Phe Ala Asn Ala Leu Gly Thr Thr Ser 70 75 Thr Leu Gly Glu Lys Lys Phe Ser Leu Thr Leu Thr Gly Cys Asp Ser 90 85 Ala Thr Val Lys Gln Ala Ser Ala Gln Phe Asp Ser Trp Ala Gly Ser 100 105 110 Ser Ser Thr Ser Gly Gly Leu Leu Val Pro Pro Ser Asn Thr Gln Gly 120 125 Ala Ala Lys Asn Val Asn Leu Val Leu Ser Asn Asp Gly Asn Ser Ala 135 Thr Asp Gln Ile Lys Leu Asp Gln Thr Asn Asn Thr Gln Lys Ala Thr 150 155 Ile Asp Thr Thr Gly Ala Gly Ala Leu Tyr Tyr Arg Val Ala Tyr Thr

165 170 Gln Gly Gln Asn Trp Asp Ala Ala Asn Asn Pro Val Ser Ala Gly Val 180 185 Val Gln Ala Gln Ala Ala Phe Thr Met Ile Tyr Glu 200 205

<210> 9606 <211> 209 <212> PRT <213> Enterobacter cloacae

<400> 9606

Ser Thr Val Pro Asn Val Met Met Leu Lys Gln Gly Ile Thr Pro Met Gly Asn Asn Met Lys Lys Asn His Cys Gly Tyr Ser Leu Ile Ala Leu 25 Ala Met Leu Ala Met Ser Gly Ser Ala Ala Ala Ala Asp Leu Asn Val Asn Phe Thr Ala Asn Ile Arg Glu Thr Thr Cys Asp Met Lys Leu Val 55 Gly Asp Thr Gly Ser Asp Thr Gln Gln Thr Leu Thr Ile Gly Asn Asn 70 75 Gly Gln Val Arg Leu Asp Asp Val Lys Asp Gly Thr Ala Asn Ala Asn 90 Phe Lys Ile Val Leu Val Glu Cys Pro Ala Ser Leu Thr Ser Leu Lys 100 105 Thr Lys Val Ser Gly Thr Arg Ser Gly Tyr Leu Tyr Ser Gly Leu Ile 115 120 Asn Gln Ile Gln Lys Ile Asp Gly Gly Ala Asp Tyr Ser Ala Val Glu 135 140 Ile Ala Arg Ala Ser Ala Pro Asp Ala Pro Phe Ile Ile Asn Ser Glu 150 155 Asp Asp Asn Glu Arg Leu Val Trp Ser Pro Thr Glu Ile Gln Asn Lys 165 170 Glu Val Ala Leu Val Ala Thr Leu Arg Glu Thr Gln Glu Asn Arg Met 185 Thr Ile Gly Asp Phe Gln Ala Val Ala Thr Phe Glu Phe Ile Tyr Glu

200

<210> 9607 <211> 374 <212> PRT <213> Enterobacter cloacae

195

<400> 9607 Arg His Leu Arg Ile Ile Ile Arg Thr Gly Lys Arg Met Arg Met Phe 10 Asn Phe Ile Arg Gln Gly Phe Thr Val Lys Gly Thr Met Ala Phe Ala 25 Met Ala Ser Val Leu Leu Thr Leu Ser His Ser Cys Trp Ala Ala Asp 45 40 Cys Arg Met Asn Asn Gly Lys Gly Gly Thr Thr Leu Ile Asn Ser 55 Glu Tyr Ser Gly Gly Thr Val Arg Leu Pro Pro Pro Gly Asn Tyr Ala 70 75 Ser Thr Leu Phe Asn Val Asn Leu Thr Pro Gly Ile Gln Ala Glu Cys 85 90 Gly Pro Gly Asn Asp Gly Phe Asn Leu Val Ser Gln Thr Asn Pro Thr 105

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Leu Leu Lys Gly Ser Ser Tyr Gly Arg Ala Met Phe Glu Thr Asn Ile
       115
                            120
                                                 125
Pro Gly Ile Tyr Tyr Ser Val Arg Val His Thr Ala Glu Ser Asp Gly
                        135
                                            140
Gly Met Gly Gly Tyr Phe Ala Met Asn Thr Thr Asp Trp Thr Thr Val
                    150
                                        155
Ala Ser Ser Gly Asn Ser Asp Pro Trp Asp Glu Lys Trp Ile Asn Thr
                                    170
Ser Val Gln Ile Tyr Ile Asp Ala Gly Tyr Arg Gly Asn Pro Asn Lys
                                185
Glu Thr Ser Ile Arg Pro Lys Pro Gly Thr Leu Gly Lys Met Ala Ile
                            200
                                                 205
Gly Asn Pro Asn Asp Ser Asn Asn Gln Pro Trp Thr Phe Val Val Asn
                        215
                                             220
Glu Asp Ser Phe Gln Ile Pro Ile Val Leu Pro Thr Cys Asp Met Ala
                    230
                                        235
Met Leu Ser Asp Gly Thr Asn Asp Val Asn Leu Gly Glu Tyr Tyr Val
                245
                                    250
Ser Asp Ile Lys Asn Asn Arg Val Lys Asp Ile Pro Phe Ser Ile Ser
                                265
            260
Leu Ser Asn Cys Thr Ser Val Ala Asn Ile Thr Thr Lys Leu Thr Thr
        275
                            280
                                                 285
Ser Lys Leu Thr Gly Lys Asn Asn Asp Leu Leu Gly Asn Thr Leu Ser
    290
                        295
                                             300
Ser Gly Ala Glu Gly Ala Gly Val Lys Ile Met Tyr Asn Gly Thr Ser
                    310
                                        315
Gln Leu Leu Pro Asn Asn Pro Asp Ser Ser Tyr Val Ile Thr Asp Tyr
                325
                                    330
Gln Thr Pro Glu Ser Lys Gln Ile Asn Tyr Val Ala Gln Leu Val Ala
            340
                                345
Asn Gly Ser Thr Val Lys Pro Gly Ser Phe Lys Ala Thr Gly Val Phe
        355
                            360
Thr Leu Ser Tyr Asp
   370
```

<210> 9608

<211> 601

<212> PRT

<213> Enterobacter cloacae

## <400> 9608

Pro Arg Thr His Gln Val Pro Pro Arg Gln Ala Ala Gly Arg Asn His Ala Leu Pro Cys Pro Ala Leu Ser Ala Gly Glu Leu Gly Leu Pro Ala Val His Gly Ser Cys Thr Gly His His Ala His His Pro Arg His 40 Gly Asp Phe Arg Leu Pro Asp Pro Gly Leu Asp Cys Asp Pro Arg Arg 55 Gly Leu Tyr Gly Glu Thr Glu Lys Cys Gln Asn Gly Glu Ser Ala Leu 70 75 Asn Val Phe Ser Leu Tyr Ser Arg Leu Arg Val Gln Arg Leu Val Thr 90 Phe Leu Thr Asn Ser Arg Gln Gln Gln Asn Pro Pro Tyr His Arg Leu 100 105 Tyr Ile Ala Thr His Ile Phe Val Cys Gln Arg Ile Ile Leu Ser Ile 120 125 Pro Lys Pro Gly Glu Leu Ser Met Asn Asn Lys Leu Ser Val Lys 135 140 Glu Lys Ile Gly Tyr Gly Met Gly Asp Ala Gly Cys Asn Ile Ile Phe 150 155

```
Gly Ala Ile Met Leu Phe Val Asn Tyr Phe Tyr Thr Asp Ile Phe Gly
               165
                                    170
Leu Ala Pro Ala Leu Val Gly Val Leu Leu Ser Val Arg Val Ile
            180
                                185
                                                    190
Asp Ala Val Thr Asp Pro Ile Met Gly Ala Ile Ala Asp Arg Thr Arg
                            200
                                                205
Ser Lys Tyr Gly Arg Phe Arg Pro Trp Leu Leu Trp Ile Ala Phe Pro
                        215
                                            220
Tyr Ala Leu Phe Ser Ile Leu Met Phe Thr Thr Pro Glu Trp Ser Tyr
                                        235
                    230
Asn Ser Lys Val Ile Tyr Ala Phe Val Thr Tyr Phe Leu Leu Ser Leu
                245
                                    250
Thr Tyr Thr Ala Ile Asn Ile Pro Tyr Cys Ser Leu Gly Gly Val Ile
            260
                                265
                                                    270
Thr Asn Asp Pro Lys Glu Arg Val Ala Cys Gln Ser Tyr Arg Phe Val
                            280
                                                285
Met Val Gly Ile Ala Thr Leu Leu Leu Ser Leu Thr Leu Leu Pro Met
                        295
                                            300
Ala Asp Trp Phe Gly Gly Asp Asn Lys Ala Lys Gly Tyr Gln Met Ala
                    310
                                        315
Met Thr Val Leu Ala Leu Ile Gly Thr Cys Met Phe Leu Phe Cys Phe
                                    330
                325
Ala Thr Val Arg Glu Arg Val Arg Pro Ala Val Gln Thr His Asp Glu
            340
                                345
Leu Lys Asn Asp Leu Lys Asp Val Trp Lys Asn Asp Gln Trp Val Arg
                            360
Ile Leu Leu Thr Leu Cys Asn Val Cys Pro Gly Phe Ile Arg Met
                        375
                                            380
Ala Ala Thr Met Tyr Tyr Val Thr Trp Val Met Gly Gln Ser Thr His
                    390
                                        395
Phe Ala Thr Leu Phe Ile Ser Leu Gly Val Val Gly Met Met Phe Gly
                405
                                    410
Ser Met Leu Ala Lys Val Leu Thr Asp Arg Trp Cys Lys Leu Lys Val
            420
                                425
Phe Phe Trp Thr Asn Ile Ala Leu Ala Ile Phe Ser Cys Ala Phe Tyr
        435
                            440
Phe Phe Asp Pro Lys Ala Thr Thr Ile Val Val Leu Tyr Val Leu
                        455
                                            460 ·
Leu Asn Ile Leu His Gln Ile Pro Ser Pro Leu His Trp Ser Leu Met
                    470
                                        475
Ala Asp Val Asp Asp Tyr Gly Glu Trp Lys Thr Gly Lys Arg Ile Thr
                485
                                    490
Gly Ile Ser Phe Ser Gly Asn Ile Phe Phe Leu Lys Leu Gly Leu Ala
                                505
                                                    510
Ile Ala Gly Ala Met Val Gly Phe Leu Leu Ser Trp Tyr Gly Tyr Asp
        515
                            520
                                                525
Ala Gly Ala Lys Ala Gln Ser Ala Asp Ala Ile Asn Gly Ile Val Leu
                        535
                                            540
Leu Phe Thr Val Ile Pro Gly Ile Gly Tyr Leu Ile Thr Ala Gly Val
                    550
                                        555
Val Arg Leu Leu Lys Val Asp Arg Glu Thr Met Lys Gln Ile Gln Ser
               565
                                    570
Asp Leu Glu Lys Arg Arg Thr Asn Tyr Arg Glu Leu Asn Asp Tyr Gln
           580
                             585
Glu Leu Lys Ala Ala Glu Thr Lys
        595
                            600
```

<sup>&</sup>lt;210> 9609

<sup>&</sup>lt;211> 329

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
<400> 9609
Gln His Ala Gly Thr Pro Tyr Leu Trp Cys Cys Tyr Ser Val Gln Ser
                                    10
Ser Met Phe Gln Tyr Tyr Asp Ser Leu Pro Ile Trp Ser Phe Ile Met
            20
                                25
Pro Pro Arg Arg Tyr Asn Pro Asp His Arg Arg Asp Ala Leu Leu Glu
                            40
Arg Ile Asn Ser Asp Ile Pro Ala Ser Val Ala His Ala Leu Arg Glu
                        55
Asp Leu Gly Gly Asp Val Ser Ala Asp Asn Asp Ile Thr Ala Gln Leu
                    70
                                        75
Leu Pro Lys Glu Thr Arg Ser His Ala Val Val Ile Thr Arg Glu Ala
                85
                                    90
Gly Val Phe Cys Gly Lys Arg Trp Val Glu Glu Val Phe Thr Gln Leu
            100
                                105
Ala Gly Asp Glu Val Gln Val Thr Trp His Val Glu Asp Gly Asp Ala
                            120
        115
Val Thr Ala Asn Gln Pro Leu Phe Glu Leu Asp Gly Pro Ser Arg Val
                                            140
                        135
Leu Leu Thr Gly Glu Arg Thr Ala Leu Asn Phe Val Gln Thr Leu Ser
                    150
                                        155
Gly Val Ala Ser Glu Val Arg Arg Tyr Val Asp Leu Leu Ala Gly Thr
                                    170
                165
Arg Thr Gln Leu Leu Asp Thr Arg Lys Thr Leu Pro Gly Leu Arg Thr
                                185
            180
Ala Leu Lys Tyr Ala Val Leu Cys Gly Gly Gly Ala Asn His Arg Leu
        195
                            200
Gly Leu Ser Asp Ala Phe Leu Ile Lys Glu Asn His Ile Ile Ala Ser
                                            220
                        215
Gly Ser Val Arg Gln Ala Val Glu Lys Ala Phe Trp Leu His Pro Asp
                    230
                                        235
Val Pro Val Glu Val Glu Val Glu Thr Leu Glu Glu Leu Asp Glu Ala
                245
                                    250
Ile Lys Ala Gly Ala Asp Ile Ile Met Leu Asp Asn Phe Asp Thr Glu
            260
                                265
                                                    270
Gln Met Arq Glu Ala Val Lys Arq Thr Asn Gly Gln Ala Gln Leu Glu
        275
                            280
Val Ser Gly Asn Val Thr Phe Asp Thr Ile Arg Glu Phe Ala Glu Thr
                        295
                                            300
Gly Val Asp Tyr Ile Ser Val Gly Ala Leu Thr Lys His Val Arg Ala
                    310
Leu Asp Leu Ser Met Arg Phe Lys
```

<210> 9610

<211> 408

<212> PRT

<213> Enterobacter cloacae

## <400> 9610

 Leu Arg Ser Lys Ser Cys Cys Ala Ser Trp Glu Cys Gln Met Ala Ala

 1
 5
 10
 15

 Asn Ser Leu Trp Arg Trp Arg Arg Ala Leu Thr Thr Glu Gly Glu Val Gln 25
 30

 Thr Gly Thr Leu Trp Ala Ile Asp Arg Asn Ala Ala Tyr Thr Ala Leu 35
 40

 Val Leu Lys Gln Leu His Pro Leu Ala Leu Lys Arg Cys Gln Gln His 50
 55

 His Arg Trp Gln Val Gln His Cys Tyr Asp Ile Phe Arg Gln Leu Ala

```
Thr Leu Leu Gln Ala Gly Leu Met Leu Ser Gln Ser Leu His Met Leu
                85
                                    90
Ala Glu Gln His Pro Leu Gln His Trp Gln Ala Leu Leu His Ser Leu
            100
                                105
Ala Asp Asp Leu Ser Glu Gly Phe Ala Leu Ser Glu Ala Met Lys Lys
                            120
                                                125
Trp Pro Glu Val Phe Ser Pro Leu Tyr Val Ser Met Val Lys Thr Gly
                        135
Glu Leu Thr Gly Lys Leu Glu Ala Cys Cys Arg Gln Leu Ala Gln Gln
                    150
                                        155
Gln Lys Ser Gln Gln Gln Leu Ser Ala Lys Val Lys Lys Ala Leu Arg
                165
                                    170
Tyr Pro Leu Ile Ile Leu Thr Leu Ala Val Phe Val Val Leu Ala Met
            180
                                185
Val Thr Leu Val Leu Pro Glu Phe Ala Ala Ile Tyr Lys Thr Phe Asn
                            200
                                                205
Thr Pro Leu Pro Leu Leu Thr Gln Ala Val Met Gly Leu Ala Ala Leu
                        215
                                            220
Val Gln Ala His Ile Leu Thr Leu Leu Ala Leu Leu Val Ala Met Val
                    230
                                        235
Val Ile Ala Cys Lys Leu Arg Arg His Pro Arg Trp Gln Tyr Val Leu
                245
                                    250
Leu His Val Pro Val Met Gly Thr Leu Met Arg Gly Gln Lys Leu Gly
            260
                                265
                                                     270
Gln Ile Phe Thr Val Leu Ser Leu Thr Gln Gln Ala Gly Ile Ala Phe
        275
                            280
                                                 285
Leu Gln Gly Leu Glu Ser Val Glu Glu Thr Val Glu Cys Gly Tyr Trp
                        295
                                            300
Gln Glu Lys Leu Arg Glu Ile Arg Ser Asp Ile Glu Gln Gly Met Pro
                    310
                                        315
Val Trp Ser Ser Phe Gln Lys Ala Ser Val Phe Thr Pro Leu Cys Ile
                325
                                    330
                                                         335
Gln Leu Ile Arg Thr Gly Glu Val Ser Gly Ser Leu Asp Val Met Leu
            340
                                345
Met Asn Leu Ala Arg His His Thr Glu Gln Thr Phe Gln Gln Ala Asp
                            360
Asn Leu Ala Ala Leu Leu Glu Pro Leu Leu Val Val Thr Gly Leu
                        375
                                            380
Ile Ile Gly Thr Leu Val Val Ala Met Tyr Leu Pro Ile Phe His Leu
                    390
                                        395
Gly Asp Ala Met Ser Ala Gly
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<210> 9611 <211> 213

<212> PRT

<213> Enterobacter cloacae

### <400> 9611

 Phe
 Pro
 Gly
 Ser
 Asp
 Leu
 Met
 Gly
 Tyr
 Ile
 Val
 Ala
 Leu
 Thr
 Gly
 Gly
 Ile
 Ile
 Val
 Ala
 His
 Ala
 Phe
 Ala
 Arg
 Leu
 Gly
 Pro

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 Thr
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 Ile
 Asp
 Ala
 Asp
 Ile
 Ile
 Ala
 Arg
 His
 Val
 Val
 Glu
 Pro

 Asn
 Thr
 Pro
 Ala
 Leu
 Asn
 Ala
 Ile
 Glu
 Ala
 His
 Phe
 Gly
 Arg
 Val

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Ile Ile His Gln Glu Thr Gln Arg Gln Ile Ala Ala Arg Ser Pro
            100
                                105
Tyr Val Leu Trp Val Val Pro Leu Leu Val Glu Asn Gln Leu Gln Asn
                            120
                                                125
Lys Ala Asp Arg Thr Leu Val Ile Asp Val Ser Arg Glu Thr Gln Ile
                       135
                                            140
Gln Arg Thr Met Ala Arg Asp His Val Ser Arg Glu His Ala Glu Gln
                    150
                                        155
Ile Leu Ala Ala Gln Ala Thr Arg Glu Ala Arg Leu Ala Val Ala Asp
                165
                                    170
Asp Val Ile Asp Asn Asn Gly Ala Pro Asp Ala Ile Ala Ser Asp Val
                                185
            180
Ala Arg Leu His Ala Gln Tyr Leu Thr Phe Ala Ala Gln Ala Val Ala
        195
                            200
Gln Glu Lys Pro
   210
<210> 9612
<211> 195
<212> PRT
<213> Enterobacter cloacae
<400> 9612
His Gln Ala Pro Ser Gly Arg Ala Gly Ser Val Arg Arg Ser Ser Ala
Ala Thr Ala Thr Val Gln Ala Ser Arg Ala Ala Ser His His Pro Pro
                                25
Leu Ala Thr Pro Val Pro Ala Ala Thr Ser Arg Arg Ser Ala Asp Val
Tyr Asp Ile Val Gln Pro Pro Ala Ser Ser Ser Val Arg Ser Ala Leu
Phe Pro Glu Cys His Ser Ala Ser Pro Gly Val Thr Leu Pro Pro Thr
                    70
                                        75
Ala Ser Pro Ala Val Ser Ser Arg Ala Ser Val Cys Gln Ser Gly Tyr
Asp Gly Thr Pro Ser Ala Cys Pro Gly Tyr His Pro Ile Pro Arg Cys
                                105
Gln Ile Ala Glu Ala Ala Gly Arg His Ala Ser Gly Gly Gln Tyr
                            120
Pro Arg Gln Pro Pro Val Lys Tyr Ala Arg Pro Gly Ser Gly Cys Pro
                        135
                                            140
Gly Val Arg Ala Ala Arg Ser Ala Ile His Asp Ala Ser Gly Arg His
                    150
                                        155
Arg Cys Pro Ala Ser Arg Pro Ser His Leu Pro Ala Asp Ser Asp His
                                    170
                                                         175
                165
Pro Ala Arg Asp Gly Ala Arg Phe Cys Pro Gly Arg Pro Gly Pro Ala
                                185
Glu Gly
        195
<210> 9613
<211> 238
<212> PRT
<213> Enterobacter cloacae
<400> 9613
Gly Ile Leu Met Lys Phe Ser Pro Ala Leu Gln Pro Ala Thr Leu Ile
                                    10
Gln Arg Tyr Lys Arg Phe Leu Ala Asp Val Ile Thr Pro Ala Gly Glu
                                25
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Thr Leu Thr Leu His Cys Pro Asn Thr Gly Ala Met Thr Gly Cys Ala

```
40
Thr Pro Gly Asp Thr Val Trp Tyr Ser Thr Ser Glu Asn Thr Lys Arg
                        55
Lys Tyr Pro His Thr Trp Glu Met Thr Glu Thr Gln Ser Gly Ala Phe
                    70
                                        75
Ile Cys Val Asn Thr Leu Arg Ala Asn Gln Leu Val Lys Glu Ala Leu
                85
                                    90
Thr Asn Gly Met Leu Pro Glu Leu Val Gly Tyr Gly Thr Gln Lys Ser
                                105
            100
Glu Val Lys Tyr Gly Asp Glu Gly Ser Arg Ile Asp Phe Met Leu Gln
                            120
Ala Glu Asp Arg Pro Glu Cys Tyr Ile Glu Val Lys Ser Val Thr Leu
                        135
                                            140
Ala Glu Gln Val Asn Gly Phe Phe Pro Asp Ala Val Thr Leu Arg Gly
                    150
                                        155
Gln Lys His Leu Arg Glu Leu Met Ser Val Ala Ala Ala Gly Lys Arg
                165
                                    170
Ala Val Leu Leu Phe Ala Val Leu His Ser Ala Ile Glu Arg Phe Ser
                                185
Pro Ala Arg His Ile Asp Pro Lys Tyr Ala Gln Leu Leu Asn Glu Ala
                            200
Gln Lys Gln Gly Val Glu Ile Phe Ala Tyr Lys Ala Glu Leu Ser Ala
                        215
Asp Asn Met Thr Leu Arg Ser Ser Leu Pro Ile Val Leu
                    230
<210> 9614
<211> 163
<212> PRT
<213> Enterobacter cloacae
<400> 9614
Arg His Gly Met Thr Leu Ala Tyr Ile Ala Ile Gly Ser Asn Leu Ala
                                    10
Ser Pro Leu Glu Gln Val Asn Ala Ala Val Gln Ala Leu Gly Glu Ile
                                25
Pro Gln Ser Arg Ile Val Ala Leu Ser Ser Phe Tyr Arg Thr Pro Pro
                            40
                                                45
Leu Gly Pro Gln Asp Gln Pro Asp Tyr Leu Asn Ala Ala Val Val Leu
                        55
                                            60
Glu Thr Thr Leu Asp Ala Glu Thr Leu Leu Asp Asn Thr Gln Arg Ile
                    70
                                        75
Glu Leu Gln Gln Gly Arg Val Arg Lys Ala Glu Arg Trp Gly Pro Arg
                85
                                    90
Thr Leu Asp Leu Asp Ile Met Leu Phe Gly His Glu Val Ile Asn Thr
            100
                                105
                                                    110
Glu Arg Leu Thr Val Pro His Tyr Asp Met Lys Asn Arg Gly Phe Met
                            120
                                                125
```

Leu Trp Pro Leu Phe Glu Val Ala Pro Asp Leu Thr Phe Pro Asp Gly

Ala Ser Leu Gln Ala Val Leu Gln Asn Leu Asn Ala Asp Lys Pro Ala

140

135

150

<210> 9615

<211> 277

145

Arg Trp

<212> PRT

<213> Enterobacter cloacae

```
Asn Ala Gln Arg Phe Ala Phe Gly Pro Ser Gly Asn Ser Met Lys Pro
                                    10
Thr Thr Ile Ser Leu Leu Gln Lys Cys Lys Gln Glu Lys Lys Arg Phe
                                25
Ala Thr Ile Thr Ala Tyr Asp Tyr Ser Phe Ala Lys Leu Phe Ala Glu
Glu Gly Ile Asn Val Met Leu Val Gly Asp Ser Leu Gly Met Thr Val
                        55
Gln Gly His Asp Ser Thr Leu Pro Val Thr Val Glu Asp Ile Ala Tyr
                    70
                                        75
His Thr Arg Ala Val Arg Arg Gly Ala Pro Ala Cys Leu Leu Ser
                8.5
Asp Leu Pro Phe Met Ala Tyr Ala Thr Pro Glu Gln Ala Phe Glu Asn
            100
                                105
Ala Ala Thr Val Met Arg Ala Gly Ala Asn Met Val Lys Ile Glu Gly
                            120
                                                 125
Gly Ala Trp Leu Val Asp Thr Val Lys Met Leu Thr Glu Arg Ala Val
                        135
                                            140
Pro Val Cys Gly His Leu Gly Leu Thr Pro Gln Ser Val Asn Ile Phe
                    150
Gly Gly Tyr Lys Val Gln Gly Arg Gly Asp Ala Ala Gln Thr Leu Phe
                                    170
Asp Asp Ala Val Ala Leu Glu Ala Ala Gly Ala Gln Leu Leu Val Leu
                                185
Glu Cys Val Pro Val Glu Leu Ala Lys Arg Ile Thr Glu Ala Leu Ser
                            200
Ile Pro Val Ile Gly Ile Gly Ala Gly Asn Val Thr Asp Gly Gln Ile
                        215
Leu Val Met His Asp Ala Phe Gly Ile Thr Gly Gly His Ile Pro Lys
                    230
                                        235
Phe Ala Lys Asn Phe Leu Thr Glu Ala Gly Asp Met Arg Ala Ala Val
                                    250
Arg Gln Tyr Ile Ala Glu Val Glu Ser Gly Val Tyr Pro Gly Glu Glu
                                265
His Ser Phe His
        275
<210> 9616
<211> 131
<212> PRT
<213> Enterobacter cloacae
<400> 9616
Lys Val Asn Val Met Ile Arg Lys Met Leu Gln Gly Lys Leu His Arg
                                    10
Val Lys Val Thr Gln Ala Asp Leu His Tyr Glu Gly Ser Cys Ala Ile
                                25
Asp Gln Asp Phe Leu Asp Ala Ala Gly Ile Leu Glu Asn Glu Ala Ile
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 <400> 9616

 Lys
 Val
 Asn
 Val
 Met
 Ile
 Arg
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 Met
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 Gly
 Lys
 Leu
 His
 Arg

 Val
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 Thr
 Gln
 Ala
 Asp
 Leu
 His
 Tyr
 Glu
 Gly
 Ser
 Cys
 Ala
 Ile

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 Asp
 Ala
 Ala
 Gly
 Ile
 Leu
 Glu
 Asn
 Glu
 Ala
 Ile

 Asp
 Gln
 Asp
 Ala
 Ala
 Gly
 Lys
 Arg
 Phe
 Ser
 Thr
 Tyr
 Ala
 Ile

 Asp
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 Trp
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130

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<210> 9617
<211> 280
<212> PRT
<213> Enterobacter cloacae
<400> 9617
Ser Thr Ser Asn Phe Lys Ser Ile Asp Lys Met Leu Ile Leu Ser Pro
Asp Val Arg Gln Gly Thr Ile Asp Ile Ile Pro Thr Gly Ser Gly Lys
Met Leu Asn Thr Ser Phe Tyr Lys Gly Phe Lys Ala Ala Cys Phe Thr
                            40
Val Ala Ala Val Ala Ser Phe Gln Ala Ser Ala Asp Ile Val Ile Ser
                                             60
Gly Thr Arg Ile Val Tyr Gln Gln Ser Gln Lys Asp Val Ile Val Ser
                    70
                                        75
Leu Asp Asn Arg Gly Lys Lys Pro Leu Leu Val Gln Ser Trp Leu Asp
                                    90
Asp Gly Arg Asp Asp Thr Asn Pro Gln Glu Leu Lys Leu Pro Phe Ile
            100
                                105
Ile Thr Pro Pro Val Ser Arg Ile Asp Pro Gln Lys Gly Gln Ser Val
                            120
                                                 125
Arg Ile Ser Tyr Leu Gly Gly Ser Leu Pro Gln Asp Arg Glu Ser Leu
                        135
Phe Trp Phe Asn Val Leu Glu Ile Pro Pro Lys Ser Lys Val Lys Asp
                    150
                                        155
Gly Glu Asn Pro Asn Gln Leu Gln Leu Ala Phe Arg Thr Arg Ile Lys
                                    170
Leu Phe Phe Arg Pro Asp Gly Leu Lys Gly Thr Pro Gly Asn Ala Ala
            180
                                185
Ala Arg Val Thr Trp Ser Gln Gln Lys Gln Gly Asn Thr Leu Asn Leu
                            200
Ile Ala His Asn Asp Ser Pro Tyr Asn Val Ser Ile Ser Asn Val Lys
                        215
Leu Lys Ser Ala Asn Lys Glu Tyr Gln Val Glu His Lys Ser Ile Leu
                    230
Pro Phe Ser Thr Gln Ile Met Gln Val Lys Gly Leu Gly Ser Thr Ala
                                    250
Thr Gly Thr Val Ala Tyr Glu Thr Ile Asn Asp Asn Gly Gly Ser Asp
Thr Phe Glu Ser Lys Val Asn
<210> 9618
<211> 866
<212> PRT
<213> Enterobacter cloacae
<400> 9618
Ser Met Leu Phe Gln Arg Ser Ile Leu Cys Leu Ala Ile Cys Ala Ala
                                    10
Phe Pro Leu His Ala Ser Glu Thr Glu Lys Lys Ala Val Asp Thr Ser
                                25
Ser Glu Thr Glu Ser Ala Ile Glu Phe Asn Asp Gln Phe Leu Ile Asp
                            40
Asn Gly Gly Gly Ile Asn Val Asp Arg Tyr Ala Tyr Gly Asn Pro Val
Leu Pro Gly Thr Tyr Arg Val Lys Val Asn Leu Asn Gly Asn Ser Lys
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Ser Thr Val Glu Met Ala Phe Ile Asp Asn Lys Thr Pro Arg Ala Ser

85 90 Ala Cys Leu Thr Lys Leu Thr Leu Thr Gln Ala Gly Val Asp Thr Ser 100 105 110 Ile Leu Gly Asp Asp Val Lys Asp Asp Glu Thr Ser Cys Val Asp Ile 120 125 Lys Lys Tyr Tyr Pro Gly Ala Ser Glu Asn Phe Asp Ser Ser Lys Gln 135 140 Glu Met Asp Leu Asn Phe Pro Gln Ile Tyr Val Leu Lys Leu Pro Ala 150 Gly Tyr Val Asp Pro Ser Leu Trp Asp Asn Gly Val Pro Ala Gly Leu 165 170 Leu Ser Tyr Asp Leu Asn Thr Trp His Ser Glu Ser Asn Gly Thr Asn 180 185 Ser Asp Thr Ala Tyr Ala Gly Leu His Tyr Gly Leu Asn Val Gly Pro 200 Trp Arg Leu Arg Ser Arg Gly Ser Leu Asn Trp Asp Ser Asp Asn Gly 215 220 Thr His Tyr Ser Ser Gln Asp Ile Tyr Leu Gln Arg Asp Ile Thr Pro 230 235 Leu Asn Ala Gln Met Val Met Gly Asp Ser Tyr Thr Arg Gly Asp Val 250 245 Phe Asp Ser Val Ser Leu Arg Gly Ala Arg Met Tyr Asn Asp Asp Arg 270 260 265 Met Leu Pro Gln Gly Thr Ser Gly Tyr Ala Pro Val Ile Arg Gly Val 280 Ala Asn Ser Asn Ala Lys Val Ser Val Met Gln Ser Gly Asn Lys Ile 295 300 Tyr Glu Thr Thr Val Pro Pro Gly Ala Phe Glu Ile Asn Asp Leu Ser 310 315 Thr Thr Gly Tyr Gly Asn Asp Leu Ile Val Thr Val Glu Glu Ala Asp 325 330 Gly Ser Lys Arg Thr Phe Thr Val Pro Phe Ser Ser Val Thr Gln Met 340 345 Leu Arg Pro Gly Ser Ser Arg Trp Asp Val Gly Ile Gly Glu Leu Asn 360 Asp Asp Ser Leu His Asp Lys Pro Asn Val Gly Tyr Ala Thr Tyr Ala 375 Tyr Gly Leu Asn Asn Thr Phe Thr Gly Tyr Val Gly Ala Gln Tyr Thr 390 Asp Met Asp Phe Tyr Ala Gly Leu Leu Gly Leu Ala Met Asn Thr Arg 405 410 Ile Gly Ala Phe Ala Leu Asp Val Thr Gly Ser Tyr Ala Asp Ile Asp 425 Gly Leu Asp Thr Leu Lys Gly Gln Ser Tyr Arg Leu Thr Tyr Ser Lys 440 Met Leu Glu Ala Thr Asn Thr Ser Leu Asn Val Ala Ala Tyr Arg Phe 455 460 Ser Thr Glu Asp Tyr Leu Ser Leu Asn Asp Ala Ala Ser Leu Gln Asp 470 475 Ser Ile His His Glu Glu Tyr Gly Asn Arg Ser Tyr Asp Ser Asn Ala 485 490 Glu Leu Tyr Ala Asp Tyr Gln Arg Thr Lys Asn Gln Ile Gln Val Ser 505 Leu Asn Gln Pro Leu Asn Val Asn Gly Asp Glu Tyr Gly Ser Leu Tyr 520 525 Ile Ser Gly Thr Trp Gln Asp Tyr Trp Asn Asp Ser Ser Ser Thr Ser 535 540 Asp Tyr Ser Val Gly Tyr Asn Asn Ser Phe Ala Tyr Gly Ser Tyr Ser 550 555 Val Ser Val Gln Arg Thr Tyr Asn Glu Thr Gly Glu Lys Asp Asp Ser 570

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Val Tyr Leu Asn Val Ser Ile Pro Phe Ser Ile Phe Asn Lys Asp Asn
            580
                               585
Ala Gln Ser Gly Gly Phe Asn Asn Val Asn Met Ser Leu Arg Thr Asp
                           600
                                                605
Leu Lys Gly Gly Thr Ser Phe Asn Ser Thr Ala Ser Gly Asn Ser Lys
                       615
                                            620
Asn Ser Glu Val Ser Tyr Ser Val Ser Ala Ser Ser Ser Gly Gly Asn
             · 630
                                        635
Tyr Gly Asn Leu Asn Gln Val Ser Gly Tyr Ser Ser Trp Asn Ser Pro
                                    650
Tyr Gly Pro Leu Gly Val Ser Ala Ser Phe Gly Asp Asp Asn Ser Lys
                                665
Gln Tyr Ser Ala Ser Tyr Asn Gly Gly Met Val Val His Ser Gly Gly
                            680
Val Val Phe Thr Ser Gly Ser Ile Gly Glu Thr Asp Ser Leu Ala Leu
                        695
                                            700
Val Lys Ala Ser Gly Ala Thr Gly Ala Arg Leu Gly Tyr Gly Gln Ser
                    710
                                        715
Arg Ile Asn Ser Ser Gly Tyr Gly Ile Met Pro Tyr Met Ser Ala Tyr
                725
                                    730
Arg Glu Asn Arg Val Ser Leu Asp Ile Ser Thr Leu Glu Ala Asp Val
                                745
            740
Glu Ile Lys Asn Thr Ser Ala Val Ala Val Pro Arg Asn Gly Ser Val
       755
                            760
                                                765
Val Phe Val Asn Phe Glu Thr Asp Glu Gly Arg Ser Leu Val Leu Glu
                        775
                                            780
Leu Gln Arg Ser Asp Asn Gly Phe Ile Pro Leu Gly Ala Asp Val Leu
                    790
                                        795
Asn Glu Lys Asn Glu Ser Ile Gly Thr Val Gly Gln Ala Gly Gln Ala
                805
                                    810
Tyr Val Arg Gly Val Glu Asn Lys Gly Ala Leu Arg Val Val Trp Gly
            820
                                825
Ser Asp Gly Ser Ser Ser Cys Thr Val His Tyr Gln Ile Pro Glu Asn
                            840
Ala Lys Lys Ala Gly Leu Thr Thr Ile Leu Ser Asn Gln Gln Cys Gln
                        855
Met
865
<210> 9619
<211> 217
<212> PRT
<213> Enterobacter cloacae
<400> 9619
Cys Ala Ser His Val Tyr Tyr His Leu Ser Ile Ile Pro Gly Thr Ser
                                    10
Met Gln Gln Ser Pro Phe Thr Leu Tyr Gln Pro Gly Leu Val Leu Leu
                                25
Met Gly Leu Ala Gly Gly Ile Leu Pro Gly Val Gly Gln Ala Ser Ser
                            40
                                                45
Gly Leu Asp Val Asn Ile Thr Ala Asn Ile Val Asn Ser Thr Cys Lys
                        55
                                            60
Met Thr Val Glu Asn Asp Gly Glu Ile Tyr Leu Pro Asn Val Met Arg
                   70
                                        75
Ser Trp Phe Tyr Asn Pro Asp Gly Ser Asp Arg Phe Thr Ala Thr Asp
               85
                                    90
Asp Ala Gly Gly Thr Pro Phe Lys Ile His Val Asp Asp Cys Tyr Gly
                               105
                                                   110
Asp Ser Ser Thr Ala Lys Lys Leu Ser Phe Ser Phe Ser Pro Gln Ser
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120

5197 Gly Phe Trp Pro Gly Gln Asn Gln Val Phe Lys Ser Asp Asp Thr Ala 130 135 140 Ala Gly Ala Ala Lys Asn Val Gly Val Val Phe Ser Glu Arg Tyr 150 155 Lys Lys Asn Val Leu Asn Asn Asp Gly Thr Ser Lys Ile Thr Tyr Asp 165 170 Val Ser Gly Gln Asp Thr Ala Phe Leu Thr Asp Tyr Gln Phe Tyr Ala 180 185 Arg Tyr Gln Asn Ile Gly Val Val Ala Gly Gly Val Val Thr Ser Lys 200 Val Leu Val Asp Val Thr Tyr Glu <210> 9620 <211> 299 <212> PRT <213> Enterobacter cloacae <400> 9620 Trp Met Leu Thr Lys Glu Val Leu Pro Met Thr Glu Lys Thr Val Trp Gln Glu Thr Leu His Asp Gln Phe Gly Gln Tyr Phe Ala Val Asp Asn 20 25 Val Leu Tyr His Glu Lys Thr Asp His Gln Asp Leu Ile Ile Phe Glu 35 40 Asn Ala Ala Phe Gly Arg Val Met Ala Leu Asp Gly Val Val Gln Thr 55 60 Thr Glu Arg Asp Glu Phe Ile Tyr His Glu Met Met Thr His Val Pro 70 75 Leu Leu Ala His Gly His Ala Lys Asp Val Leu Ile Ile Gly Gly Gly 85 90 Asp Gly Ala Met Leu Arg Glu Val Ser Arg His Gln Asn Val Glu Thr 100 105 Ile Ser Met Val Glu Ile Asp Ala Gly Val Val Ser Phe Cys Arg Gln 120 Tyr Leu Pro Asn His Asn Ala Gly Ser Tyr Asp Asp Pro Arg Phe Asn 140 135 Leu Val Ile Asp Asp Gly Val Asn Phe Val Asn Gln Thr Thr Gln Thr 150 Phe Asp Val Ile Ile Ser Asp Cys Thr Asp Pro Ile Gly Pro Gly Ala 170 Ser Leu Phe Thr Ser Ser Phe Tyr Glu Gly Cys Lys Arg Cys Leu Lys 185 190 Pro Gly Gly Ile Phe Val Ala Gln Asn Gly Val Cys Phe Leu Gln Gln 195 200 Asp Glu Ala Leu Asp Ser His Arg Lys Leu Ser Thr Tyr Phe Ala Asp 215

235 230 Thr Phe Ala Trp Ala Thr Asp Asn Asp Val Leu Arg His Leu Ser Thr 245 250 Glu Ile Ile Gln Ala Arg Phe His Gln Ala Gly Leu Gln Cys Arg Tyr

Val Ser Phe Tyr Gln Ala Ala Ile Pro Thr Tyr Tyr Gly Gly Ile Met

220

260 265 270

Tyr Asn Pro Ala Ile His Thr Ala Ala Phe Ala Leu Pro Gln Tyr Leu 280

Gln Asp Ala Leu Ser Ser Lys Glu Val Asn 295

<sup>&</sup>lt;210> 9621

<sup>&</sup>lt;211> 265

<sup>&</sup>lt;212> PRT

#### <213> Enterobacter cloacae

<400> 9621 Leu Lys Lys Leu Lys Leu His Gly Phe Asn Asn Leu Thr Lys Ser Leu 10 Ser Phe Cys Ile Tyr Asp Ile Cys Tyr Ala Lys Thr Ala Glu Glu Arg 25 Asp Gly Tyr Ile Ala Tyr Ile Asp Glu Leu Tyr Asn Ala Asn Arg Leu Thr Glu Ile Leu Thr Glu Thr Cys Ser Ile Ile Gly Ala Asn Ile Leu 55 Asn Ile Ala Arg Gln Asp Tyr Glu Pro Gln Gly Ala Ser Val Thr Ile 70 75 Leu Val Ser Glu Glu Pro Val Asp Pro Gln Leu Ile Asp Lys Thr Glu 85 90 His Pro Gly Pro Leu Pro Glu Val Val Ala His Leu Asp Lys Ser 100 105 110 His Ile Cys Val His Thr Tyr Pro Glu Ser His Pro Glu Gly Gly Leu 120 115 Cys Thr Phe Arg Ala Asp Ile Glu Val Ser Thr Cys Gly Val Ile Ser 135 140 Pro Leu Asn Ala Leu Asn Tyr Leu Ile His Gln Leu Glu Ser Asp Ile 150 155 Val Thr Ile Asp Tyr Arg Val Arg Gly Phe Thr Arg Asp Ile Asn Gly 165 170 Met Lys His Phe Ile Asp His Glu Ile Asn Ser Ile Gln Asn Phe Met 180 185 Ser Glu Asp Met Lys Ser Leu Tyr Asp Met Met Asp Val Asn Val Tyr 200 Gln Glu Asn Ile Phe His Thr Lys Met Leu Leu Lys Glu Phe Asp Leu 215 220 Lys His Tyr Met Phe His Thr Lys Pro Glu Asp Leu Ser Glu Glu Glu 230 235 Arg Lys Val Ile Thr Asp Leu Leu Trp Lys Glu Met Arg Glu Ile Tyr 245 250 Tyr Gly Arg Asn Ile Pro Thr Val 260

<210> 9622

<211> 464

<212> PRT

<213> Enterobacter cloacae

# <400> 9622

Gln Pro His Thr Arg Phe Gln Met Glu Ala Gln Gln His Gly Asp Gln 10 Leu Lys Arg Gly Leu Lys Asn Arg His Ile Gln Leu Ile Ala Leu Gly 25 Gly Ala Ile Gly Thr Gly Leu Phe Leu Gly Ser Ala Ser Val Ile Gln 40 45 Ser Ala Gly Pro Gly Ile Ile Leu Gly Tyr Ala Ile Ala Gly Phe Ile 55 60 Ala Phe Leu Ile Met Arg Gln Leu Gly Glu Met Val Val Glu Pro 70 75 Val Ala Gly Ser Phe Ser His Phe Ala Tyr Lys Tyr Trp Gly Ser Phe 85 90 Ala Gly Phe Ala Ser Gly Trp Asn Tyr Trp Val Leu Tyr Val Leu Val 105 Ala Met Ala Glu Leu Thr Ala Val Gly Lys Tyr Ile Gln Phe Trp Tyr 120

Pro Glu Ile Pro Thr Trp Ala Ser Ala Ala Phe Phe Val Leu Ile

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130
                       135
                                            140
Asn Ala Ile Asn Leu Thr Asn Val Lys Val Phe Gly Glu Met Glu Phe
                   150
                                       155
Trp Phe Ala Ile Ile Lys Val Ile Ala Val Val Ala Met Ile Ile Phe
               165
                                    170
Gly Gly Trp Leu Leu Phe Ser Gly Asn Gly Gly Pro Gln Ala Thr Val
                                185
Arg Asn Leu Trp Glu Gln Gly Gly Phe Leu Pro His Gly Met Thr Gly
                            200
                                                205
Leu Val Met Met Ala Ile Ile Met Phe Ser Phe Gly Gly Leu Glu
                        215
                                            220
Leu Val Gly Ile Thr Ala Ala Glu Ala Asp Asn Pro Glu Gln Ser Ile
                    230
                                        235
Pro Lys Ala Thr Asn Gln Val Ile Tyr Arg Ile Leu Ile Phe Tyr Val
                245
                                    250
Gly Ser Leu Ala Val Leu Leu Ser Leu Leu Pro Trp Thr Arg Val Thr
                                265
                                                    270
            260
Ala Asp Thr Ser Pro Phe Val Leu Ile Phe His Glu Leu Gly Asp Thr
        275
                            280
Phe Val Ala Asn Ala Leu Asn Val Val Leu Thr Ala Ala Leu Ser
                                            300
                        295
Val Tyr Asn Ser Cys Val Tyr Cys Asn Ser Arg Met Leu Phe Gly Leu
                    310
                                        315
Ala Gln Gln Gly Asn Ala Pro Lys Ala Leu Leu Thr Val Asp Lys Arg
                325
                                    330
                                                        335
Gly Val Pro Val Asn Thr Ile Ile Val Ser Ala Val Val Thr Ala Leu
            340
                                345
Cys Val Leu Ile Asn Tyr Leu Ala Pro Glu Ser Ala Phe Gly Leu Leu
                            360
Met Ala Leu Val Val Ser Ala Leu Val Ile Asn Trp Ala Met Ile Ser
    370
                        375
                                            380
Leu Ala His Ile Lys Phe Arg Arg Ala Lys Gln Gln Gly Val Thr
                    390
                                        395
Thr Arg Phe Pro Ala Leu Leu Tyr Pro Leu Gly Asn Trp Val Cys Leu
                405
                                    410
Leu Phe Met Ala Ala Val Leu Val Ile Met Leu Ile Thr Pro Gly Met
            420
                                425
Ala Ile Ser Val Tyr Leu Ile Pro Val Trp Ile Ala Ile Leu Gly Val
                            440
Gly Tyr Met Val Lys Gln Lys Asn Ala Lys Thr Val Lys Ala His
<210> 9623
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<211> 333

<212> PRT

<213> Enterobacter cloacae

<400> 9623

Thr Ile Ile Arg Asn Ser Lys Pro Leu Arg Leu Asn Lys Glu Ser Arg 10 Met Gln Thr Trp Pro Asn Pro Phe Ile Glu Gln Arg Ala Asp Pro Tyr 20 25 Ile Leu Arg His Asp Gly Gln Tyr Tyr Phe Ile Ala Ser Val Pro Glu 40 45 Tyr Asp Arg Leu Ala Ile Arg Arg Ala Asp Ser Leu Glu Gly Leu Arg 55 60 Asp Ala Glu Glu Val Val Trp Arg Lys Pro Asp Thr Gly Pro Met 70 75 Ser Gln Leu Ile Trp Ala Pro Glu Leu His His Ile Asp Gly Ser Trp 90 Tyr Ile Tyr Phe Ala Ala Thr His Thr Gln Ala Leu Asp His Leu Gly

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100
                                105
Met Phe Gln His Arg Met Phe Ala Ile Glu Cys Ala Asp Arg Asp Pro
                           120
                                                125
Leu Thr Gly Thr Trp Val Glu Lys Gly Gln Ile Lys Thr Pro Phe Asp
                        135
                                            140
Thr Phe Ala Leu Asp Ala Thr Thr Phe Val His Gln Gly Lys Arg Trp
                   150
                                        155
Tyr Leu Trp Ala Gln Lys Ala Pro Asp Ile Ser Gly Asn Ser Asn Leu
                165
                                    170
Tyr Leu Cys Glu Met Glu Asn Pro Trp Thr Leu Lys Gly Glu Pro Val
                                185
Met Leu Ser Lys Pro Glu Tyr Asp Trp Glu Cys Arg Gly Phe Trp Val
                            200
Asn Glu Gly Pro Ala Val Leu Phe His Gly Asp Lys Leu Phe Ile Ser
                        215
                                            220
Tyr Ser Ala Ser Ala Thr Asp Glu Asn Tyr Cys Met Gly Leu Met Trp
                    230
                                        235
Ala Asp Leu Asn Ala Asp Pro Gln Asn Pro Ala Asn Trp His Lys Ser
                245
                                    250
Pro Arg Pro Val Phe Val Thr Ser Tyr Glu Asn Arg Gln Tyr Gly Pro
                                                    270
            260
                                265
Gly His Asn Ser Phe Thr Gln Thr Pro Glu Gly Glu Asp Val Leu Val
        275
                            280
                                                 285
Tyr His Ala Arg Asn Tyr Thr Glu Ile Glu Gly Asp Pro Leu Tyr Asp
                        295
                                            300
Pro Asn Arg His Thr Arg Leu Lys Leu Ile Arg Trp Asn Glu Asn Gly
                    310
                                        315
Met Pro Glu Phe Gly Ile Pro Pro Ala Asp Thr Pro
                325
<210> 9624
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 9624
Asn Ser Met Asn Phe Ser Pro Phe Ser Ser Thr Thr Val Pro Pro Leu
Ser Ser Trp Pro Ala Ser Met Pro Pro Ser Ile Thr Lys Ser Ala Pro
Pro Pro Lys Ala Phe Ala Thr Ser Pro Gly Met Val Gln Pro Pro Ser
Leu Met Ile Trp Pro Pro Arg Pro Cys Ala Ala Ser Ala His Ser Ile
                        55
Thr Ala Asp Ser Cys Gly
<210> 9625
<211> 308
<212> PRT
<213> Enterobacter cloacae
<400> 9625
Gly Gly Ser Leu Ser Arg Leu Val Thr Val Asp Met Ser Glu Ser His
                                    10
Tyr Ile Gly Arg Phe Ala Pro Ser Pro Ser Gly Glu Leu His Phe Gly
                                25
Ser Leu Ile Ala Ala Leu Gly Ser Tyr Leu Gln Ala Arg Ala Arg Gln
                            40
Gly Gln Trp Leu Val Arg Ile Glu Asp Ile Asp Pro Pro Arg Glu Val
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Pro Gly Ala Ala Glu Thr Ile Leu Arg Gln Leu Glu His Tyr Gly Leu
                    70
                                        7.5
His Trp Asp Gly Asp Val Leu Trp Gln Ser Gln Arg His Asp Ala Tyr
                85
                                    90
Arg Glu Arg Leu Ala Trp Leu Ala Glu Gln Gly Leu Ser Tyr Asn Cys
            100
                                105
Thr Cys Thr Arg Ala Arg Ile Gln Ser Val Gly Gly Val Tyr Asp Gly
                            120
His Cys Arg Thr Arg His Asn Gly Pro Glu Asn Ala Ala Val Arg Leu
                        135
                                            140
Ile Gln Arg Ser Pro Val Thr Gln Phe Thr Asp Val Val Ser Gly Thr
                    150
                                        155
Ile Gln Ala Asp Glu Arg Leu Ala Arg Glu Asp Phe Ile His Arg
                165
                                    170
Arg Asp Gly Leu Phe Ala Tyr Asn Leu Ala Val Val Asp Asp His
            180
                                185
Phe Gln Gly Val Thr Glu Ile Val Arg Gly Ala Asp Leu Val Glu Pro
                            200
        195
Thr Val Arg Gln Ile Ser Leu Tyr Gln Gln Phe Gly Trp Thr Val Pro
                        215
                                            220
Asp Tyr Ile His Leu Pro Leu Ala Val Asn Asp Gln Gly Asn Lys Leu
                    230
                                        235
Ser Lys Gln Asn His Ala Pro Ala Leu Pro Asp Gly Asp Pro Arg Pro
                245
                                    250
Val Leu Ile Asp Ala Leu Arg Phe Leu Asn Gln Asn Val Thr Gln Glu
            260
                                265
Trp Gln Asp Leu Ser Leu Asp Glu Leu Leu Lys Thr Ala Ile Ala Asp
        275
                            280
Trp Ala Leu Ile Ala Val Pro Lys Ile Gln His Ser Gln Met Arg Cys
   290
                        295
Ala Glu Leu
305
<210> 9626
<211> 480
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<212> PRT

<213> Enterobacter cloacae

<400> 9626

Leu Ala Ala Phe Leu Ile Thr Lys His Thr Thr Arg Cys Thr Ile Phe Thr Arg Val Ala Asn Phe Cys Arg Lys Val Leu Ser Arg Glu Glu Ser 25 Met Ala Asn Asp Ala Ile Ala Gln Pro His Met Ser Val Ile Pro Arg Glu Gln His Asn Ile Ser Arg Lys Asp Ile Ser Glu Asn Ala Leu Lys Val Leu Tyr Arg Leu Asn Lys Ala Gly Tyr Glu Ala Tyr Leu Val Gly 75 70 Gly Gly Val Arg Asp Leu Leu Gly Lys Lys Pro Lys Asp Phe Asp 90 85 Val Thr Thr Ser Ala Thr Pro Glu Gln Val Arg Lys Leu Phe Arg Asn 105 Cys Arg Leu Val Gly Arg Arg Phe Arg Leu Ala His Val Met Phe Gly 120 Pro Glu Ile Ile Glu Val Ala Thr Phe Arg Gly His His Glu Ala Gly 135 Val Asn Asp Arg Thr Thr Ser Gln Arg Gly Gln Asn Gly Met Leu Leu 150 155 Arg Asp Asn Ile Phe Gly Ser Ile Glu Glu Asp Ala Gln Arg Asp 170

```
Phe Thr Ile Asn Ser Leu Tyr Tyr Ser Val Ala Asp Phe Thr Val Arg
            180
                                185
Asp Tyr Val Gly Gly Met Gln Asp Leu Lys Asp Gly Leu Ile Arg Leu
                            200
                                                 205
Ile Gly Thr Pro Glu Thr Arg Tyr Arg Glu Asp Pro Val Arg Met Leu
                        215
                                            220
Arg Ala Val Arg Phe Ala Ala Lys Leu Asn Met Arg Ile Ser Pro Glu
                    230
                                         235
Thr Ala Glu Pro Ile Pro Arg Leu Ala Thr Leu Ile Asn Asp Val Pro
                245
                                    250
Pro Ala Arg Leu Phe Glu Glu Ser Leu Lys Leu Gln Ala Gly Tyr
            260
                                265
                                                     270
Gly Phe Glu Thr Tyr Asn Leu Leu Arg Glu Tyr Asn Leu Phe Gln Pro
                            280
        275
                                                 285
Leu Phe Pro Thr Ile Thr Arg Tyr Phe Thr Glu Asn Gly Asp Ser Ala
                        295
                                             300
Met Glu Arg Met Ile Ala Gln Val Leu Lys Asn Thr Asp Thr Arg Ile
                    310
                                         315
His Asn Asp Met Arg Val Asn Pro Ala Phe Leu Phe Ala Ala Met Phe
                325
                                     330
Trp Tyr Pro Leu Leu Glu Thr Ala Gln Arg Ile Thr Gln Glu Ser Gly
            340
                                345
Leu Ala Tyr Tyr Asp Ala Phe Ala Leu Ala Ala Asn Asp Val Leu Asp
                            360
                                                 365
Glu Gly Cys Arg Thr Leu Ala Ile Pro Lys Arg Ile Thr Thr Leu Val
    370
                        375
                                             380
Arg Asp Ile Trp Gln Leu Gln Leu Arg Met Ser Arg Arg Gln Gly Lys
                    390
                                         395
Arg Ala Trp Lys Leu Met Glu His Pro Lys Phe Arg Ala Ala Phe Asp
                405
                                     410
Leu Leu Ser Leu Arg Ala Glu Val Glu Arg Asn Gln Glu Leu Gln Arg
                                425
Leu Ala Gln Trp Trp Gly Glu Phe Gln Val Ser Ala Pro Pro Glu Gln
                            440
Lys Asp Met Leu Thr Asp Leu Asp Asp Glu Pro Ala Pro Arg Arg Arg
                        455
His Arg Arg Pro Arg Lys Arg Ala Pro Arg Arg Glu Gly Thr Ala
                    470
                                                             480
<210> 9627
<211> 202
<212> PRT
<213> Enterobacter cloacae
<400> 9627
Ile Tyr Leu Arg Val Ile Ser Ala Gly Lys Arg Ser Asn Ile Met Lys
                                    10
Phe Asn Ser Thr Phe Ile Ala Leu Ser Val Ser Ala Leu Leu Phe Ser
            20
                                25
Gly Met Ala Ser Ala Ala Ile Thr Gly Thr Pro Ser Val Glu Leu Thr
                            40
                                                 4.5
Ile Lys Ser Lys Ile Val Ser Gly Thr Cys Thr Ala Lys Val Leu Asn
                        55
                                            60
Asp Ala Gly Thr Ala Ser Thr Glu Ile Ala Phe Gly Asp Val Tyr Lys
                    70
                                         75
Ser Asp Leu Val Asn Lys Thr Arg Val Glu Pro Leu Lys Ile Ser Phe
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90

Thr Asn Cys Ser Gly Val Thr Arg Ala Thr Val Ser Ala Ala Lys Gly 100 105 110 Ala Gly Gly Glu Cys Ser Gly Val Asn Lys Thr Gly Asp Ser Tyr Ser 115 120 125

```
Gly Gly Leu Ala Thr Gly Phe Glu Ile Trp Ser Gly Val Val Asp Thr
                        135
                                            140
Gly Glu Leu Met Ser Cys Asn Thr Pro Pro Ala Ala Lys Asp Val Thr
                    150
                                        155
Ile Thr Asp Gly Thr Gly Glu Phe Pro Met Asn Ser Arg Ile Val Ile
                165
                                    170
Gly Gln Gly Gln Thr Ile Ala Glu Val Gly Ala Gly Ala Val Asn Ala
            180
                                185
Pro Val Thr Phe Thr Ile Thr Tyr Pro
<210> 9628
<211> 256
<212> PRT
<213> Enterobacter cloacae
<400> 9628
Ile Gln Leu Thr Leu Ser Ser Asp Thr Arg Cys Val Val Ser Leu Lys
                5
                                    10
Val Gly Leu Pro Tyr Ser Ser Ala Thr Gln Ser Leu Gly Tyr Arg Ser
                                25
                                                     30
Leu Thr Ser Met Asn Asp Ile Asp Thr Leu Ile Ser Asn Asn Ala Leu
                            40
Trp Ser Lys Met Leu Val Glu Glu Asp Pro Gly Phe Phe Gly Lys Leu
Ala Gln Ala Gln Asn Pro Arg Phe Leu Trp Ile Gly Cys Ser Asp Ser
Arg Val Pro Ala Glu Arg Leu Thr Gly Leu Glu Pro Gly Glu Leu Phe
                                     90
Val His Arg Asn Val Ala Asn Leu Val Ile His Thr Asp Leu Asn Cys
            100
Leu Ser Val Val Gln Tyr Ala Val Asp Val Leu Glu Val Glu His Ile
                            120
Ile Ile Cys Gly His Tyr Gly Cys Gly Gly Val Gln Ala Ala Val Glu
                        135
Asn Thr Glu Leu Gly Leu Ile Asp Asn Trp Leu Leu His Ile Arg Asp
                    150
                                        155
Ile Trp Phe Lys His Ser Ser Leu Leu Gly Glu Met Pro Gln Glu Arg
                165
                                    170
Arg Leu Asp Thr Leu Cys Glu Leu Asn Val Met Glu Gln Val Tyr Asn
            180
                                185
                                                     190
Leu Gly His Ser Thr Ile Met Gln Ser Ala Trp Lys Arg Gly Gln Lys
        195
                            200
                                                205
Val Ser Ile His Gly Trp Ala Tyr Gly Ile His Asp Gly Leu Leu Arg
                        215
                                            220
Asn Leu Glu Val Thr Ala Thr Asn Arg Glu Thr Leu Glu Gln Arg Tyr
                    230
                                        235
Arg Ser Gly Ile Ala Asn Leu Lys Leu Lys His Val Asn His Lys
                                    250
<210> 9629
<211> 808
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(535)
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Gln Ile Ile Asn Lys Thr Asp Glu Tyr Phe Ser Met Ala Glu Thr Lys

10 Thr Lys Gln Pro Arg Leu Leu Val Thr Leu Thr Ala Ala Phe Ala Ala 25 Phe Cys Ala Leu Tyr Leu Leu Ile Gly Gly Val Trp Leu Val Ala Ile 40 Gly Gly Ser Trp Tyr Tyr Pro Ile Ala Gly Leu Val Met Val Gly Val Thr Val Leu Leu Arg Arg Lys Gln Ser Ala Leu Trp Leu Tyr Ala 70 Ala Leu Leu Leu Ala Thr Met Ile Trp Gly Val Trp Glu Val Gly Phe 90 85 Asp Phe Trp Ala Leu Thr Pro Arg Ser Asp Ile Leu Val Phe Phe Gly 105 100 Ile Trp Leu Ile Leu Pro Phe Val Trp Arg Arg Leu Ile Val Pro Ser 120 Ser Gly Ala Val Ala Gly Leu Val Val Ala Leu Leu Ile Ser Gly Gly 135 140 Ile Leu Thr Trp Ala Gly Phe Asn Asp Pro Gln Glu Ile Asn Gly Thr 150 155 Leu Asn Ala Glu Ser Thr Pro Ala Ala Ala Ile Ser Gln Val Ala Asp 165 170 Gly Asp Trp Pro Ala Tyr Gly Arg Asn Gln Glu Gly Gln Arg Tyr Ser 180 185 Pro Leu Lys Gln Ile Asn Ala Asp Asn Val Lys Asn Leu Lys Glu Ala 200 Trp Val Phe Arg Thr Gly Asp Leu Lys Met Pro Asn Asp Pro Gly Glu 215 Leu Thr Asn Glu Val Thr Pro Ile Lys Val Gly Asn Met Leu Tyr Leu 230 235 Cys Thr Ala His Gln Arg Leu Phe Ala Leu Asp Ala Ala Thr Gly Lys 245 250 Glu Lys Trp His Phe Asp Pro Gln Leu Asn Ser Asn Pro Ser Phe Gln His Ile Thr Cys Arg Gly Val Ser Tyr His Glu Ala Arg Ala Asp Asn 280 Ala Ser Pro Glu Val Ile Ala Asp Cys Pro Arg Arg Ile Met Leu Pro 300 Val Asn Asp Gly Arg Leu Phe Ala Ile Asn Ala Glu Thr Gly Lys Leu 310 315 Cys Glu Thr Phe Ala Asn Lys Gly Ile Leu Asn Leu Gln Thr Asn Met 325 330 Pro Asp Thr Thr Pro Gly Leu Tyr Glu Pro Thr Ser Pro Pro Ile Ile 345 Thr Asp Lys Thr Ile Val Ile Ala Gly Ser Val Thr Asp Asn Phe Ser 355 360 Thr Arg Glu Thr Ser Gly Val Ile Arg Gly Phe Asp Val Asn Thr Gly 375 380 Lys Leu Leu Trp Ala Phe Asp Pro Gly Ala Lys Asp Pro Asn Ala Ile 390 395 Pro Ser Asp Glu His Thr Phe Thr Phe Asn Ser Pro Asn Ser Trp Ala 405 410 Pro Ala Ala Tyr Asp Ala Lys Leu Asp Leu Val Tyr Leu Pro Met Gly 420 425 Val Thr Thr Pro Asp Ile Trp Gly Gly Asn Arg Thr Pro Glu Gln Glu 440 Arg Tyr Ala Ser Ser Ile Val Ala Leu Asn Ala Thr Thr Gly Lys Leu 455 460 Ala Trp Ser Tyr Gln Thr Val His His Asp Leu Trp Asp Met Asp Met 470 475 Pro Ser Gln Pro Thr Leu Ala Asp Ile Thr Val Asn Gly Lys Thr Val 490

```
Pro Val Ile Tyr Ala Pro Ala Lys Thr Gly Asn Ile Phe Val Leu Asp
            500
                                505
Arg Ser Asn Gly Lys Leu Val Val Pro Ala Pro Glu Lys Pro Val Pro
                            520
                                                525
Gln Gly Ala Ala Lys Gly Xaa Tyr Val Thr Lys Thr Gln Pro Phe Ser
                        535
                                            540
Asp Leu Ser Phe Arg Pro Lys Lys Asp Leu Ser Gly Ala Asp Met Trp
                    550
                                        555
Gly Ala Thr Met Phe Asp Gln Leu Val Cys Arg Val Met Phe His Gln
                565
                                    570
Leu Arg Tyr Glu Gly Ile Phe Thr Pro Pro Ser Glu Gln Gly Thr Leu
                                585
Val Phe Pro Gly Asn Leu Gly Met Phe Glu Trp Gly Gly Ile Ser Val
                            600
                                                605
Asp Pro Asn Arg Gln Val Ala Ile Ala Asn Pro Met Ala Leu Pro Phe
   610
                        615
                                            620
Val Ser Arg Leu Ile Pro Arg Gly Pro Gly Asn Pro Met Glu Gln Pro
                    630
                                        635
Lys Asp Ala Lys Gly Ser Gly Thr Glu Ala Gly Ile Gln Pro Gln Tyr
               645
                                    650
Gly Val Pro Tyr Gly Val Thr Leu Asn Pro Phe Leu Ser Pro Phe Gly
            660
                                665
Leu Pro Cys Lys Gln Pro Ala Trp Gly Tyr Ile Ser Gly Leu Asp Leu
                            680
                                                685
Lys Thr Asn Lys Ile Val Trp Lys Lys Arg Ile Gly Thr Pro Gln Asp
                        695
                                            700
Ser Met Pro Phe Pro Met Pro Val Pro Phe Asn Met Gly Met
                    710
                                        715
Pro Met Leu Gly Gly Pro Ile Ser Thr Ala Gly Asn Val Leu Phe Ile
                725
                                    730
Ala Ala Thr Ala Asp Asn Tyr Leu Arg Ala Tyr Asn Met Thr Asn Gly
                                745
Glu Lys Leu Trp Gln Gly Arg Leu Pro Ala Gly Gly Gln Ala Thr Pro
                            760
Met Thr Tyr Glu Val Asn Gly Lys Gln Tyr Val Val Ile Ser Ala Gly
                        775
Gly His Gly Ser Phe Gly Thr Lys Met Gly Asp Tyr Ile Val Ala Tyr
                                        795
                    790
Ala Leu Pro Asp Asp Ala Lys
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<210> 9630 <211> 212 <212> PRT

<213> Enterobacter cloacae

<400> 9630

 Met
 Arg
 Leu
 Arg
 Ala
 Ser
 Gly
 Ala
 Ser
 Ala
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 Gly
 Ala
 Leu
 Gly
 Met
 Gly
 Lys
 Ala

 Gly
 Leu
 Ser
 Ala
 Ala
 Lys
 Thr
 Ala
 Arg
 Leu
 Gly
 Arg
 Gly
 Ile
 Ala
 Leu
 Arg
 Leu
 Leu
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 Cys
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 Arg

Cys Ala Asn Ser Tyr Ala Leu Ser Glu Asn Glu Ala Glu Asp Met Ala 115 120 Asp Leu Thr Ala Val Phe Val Phe Leu Lys Asn Asp Cys Gly Tyr Gln 135 140 Asn Leu Pro Asn Gly Gln Ile Arg Arg Ala Leu Val Phe Phe Ala Gln 150 155 Gln Asn Gln Trp Asp Leu Ser Asn Tyr Asp Ser Phe Asp Met Lys Ala 170 165 Leu Gly Glu Asp Ser Tyr Arg Asp Leu Ser Gly Ile Gly Ile Pro Thr 180 185 Ala Lys Lys Cys Lys Ala Leu Ala Arg Asp Ser Leu Ser Leu Leu Ala 200 195 Tyr Val Lys 210 <210> 9631 <211> 518 <212> PRT <213> Enterobacter cloacae <400> 9631 Tyr Ser Arg Gln Gln Gln Arg Leu Thr Ala Leu His Ser Ser Arg Trp 10 Ser Gln Ser Met Lys Leu Pro Phe Lys Pro His Leu Leu Val Leu Leu 25 Cys Ser Ala Gly Leu Phe Ala Ala Ser Gly Val Met Phe Val Lys Ser Arg Ala Thr Glu Pro Ala Pro Ala Pro Ala Pro Val Ala Pro Gln Leu Pro Asp Pro Ala Ala Gln Pro Ala Pro Val Ala Thr Pro Ala Tyr Thr 70 75 Ala Ala Gln Ile Asp Gln Trp Thr Ala Pro Ile Ala Leu Tyr Pro Asp 90 Ala Leu Leu Ser Gln Ile Leu Met Ala Ser Thr Tyr Pro Ala Ser Val 100 105 Ile Gln Ala Ala Gln Trp Ser Lys Asp Asn Pro Lys Met Gln Gly Asp 120 Ala Ala Ile Gln Ala Val Ser Gly Gln Pro Trp Asn Ala Ser Val Lys 135 140 Ser Leu Val Ala Phe Pro Gln Leu Met Ser Leu Met Gly Glu Asn Pro 150 155 Ser Trp Val Gln Ser Leu Gly Asp Ala Phe Leu Ala Gln Pro Lys Asp 170 165 Val Met Asp Ser Val Gln Arg Leu Arg Leu Leu Ala Gln Gln Thr Gly 180 185 Thr Leu Gln Ser Thr Pro Gln Gln Thr Val Thr Thr Val Lys Lys Ser 195 200 Ala Pro Ala Ser Ala Ser Thr Ala Ala Thr Ser Thr Ser Ala Ser Pro 215 220 Thr Val Ile Lys Ile Glu Pro Ala Asp Pro Gln Val Val Tyr Val Pro 230 235 Thr Tyr Asn Pro Ser Thr Val Tyr Gly Thr Trp Pro Asn Ala Ser Tyr 245 250 Pro Pro Val Tyr Leu Pro Pro Ser Pro Gly Gln Gln Phe Thr Asn Ser 265 Phe Val Arg Gly Phe Gly Tyr Ser Leu Gly Val Ala Thr Thr Tyr Ala 280 Leu Phe Ser Asn Ile Asp Trp Asp Asp Asp Asp His His His Asp 295 His Asp Asp Asp His His Gly Gly Tyr Ser His Asn Gly Asp Asn Ile

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Asn Ile Asn Val Asn Asn Phe Asn Lys Ile Thr Gly Glu His Arg Thr
                325
                                    330
Asp Asn His Gln Val Trp Gln His Asn Pro Ala Tyr Arg Asn Gly Val
            340
                                345
                                                     350
Pro Tyr Ala Asn Ser Gln Leu Ala Ser Arg Tyr His Gln Thr Ser Val
                            360
Pro Gly Gly Leu Ser Ala Thr Arg Gln Gln Pro Val Asn Arg Asp Ser
    370
                        375
                                             380
Gln Arg Gln Ala Ala Met Ala Gln Val Gln Gln Ser Thr Gly Lys Thr
                                         395
                    390
Leu Thr Gln Leu Gln His Gly Asp Ala His Phe Pro Gln His Ser Ala
                405
                                     410
Ser Ala Gln Gln Leu Lys Gln Leu Ser Gln Arg Ser Asn Tyr Arg Gly
                                425
                                                     430
            420
Tyr Asp Ser Ala Arg Pro His Ala Gln Gln Met Asn Asn Thr Leu Ala
                            440
        435
Gln Thr Arg Arg Pro Thr Gln Val Gln His Gln Pro Leu Arg Ala Asn
                        455
                                             460
Ala Leu Ser Gly Asn Asp Ser Arg Ser Ala Ser Trp Gln Ala Gln His
                    470
                                         475
Gln Arg Gly Leu Gln Ser Arg Gln His Ala Ser Leu Asn Ser Glu Gln
                485
                                     490
Arg Ala Ser Phe Arg Gln Gln Leu Ser Glu His His Thr Glu His His
            500
                                505
Glu Phe His Arg Arg
        515
<210> 9632
<211> 149
<212> PRT
<213> Enterobacter cloacae
<400> 9632
Gly Ala Asp Met Asn Arg Gln Gln Gly Phe Thr Leu Ile Glu Leu Met
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Val Val Ile Gly Ile Ile Ala Ile Leu Ser Ala Ile Gly Val Pro Ala
Tyr Gln Asn Tyr Leu Arg Lys Ala Ala Leu Thr Asp Met Leu Gln Thr
Phe Ile Pro Tyr Arg Thr Ala Ile Glu Leu Cys Ala Leu Asp Arg Gly
Gly Val Asp Arg Cys Asp Ala Gly Thr Asn Gly Ile Pro Ser Pro Thr
                    70
                                         75
Thr Thr Arg Tyr Val Ser Ala Met Ser Val Ala Lys Gly Ile Val Ser
Leu Thr Gly Gln Glu Ser Leu Asn Gly Leu Glu Val Leu Met Thr Pro
                                105
            100
Ile Trp Ser Asp Gly Asn Gly Met Thr Gly Trp Thr Arg Asp Cys Lys
                            120
                                                 125
Ile Ala Ser Asp Thr Ala Leu Arg Gln Ala Cys Glu Asp Val Phe Arg
    130
                        135
Phe Asp Asn Asn
145
<210> 9633
<211> 464
<212> PRT
<213> Enterobacter cloacae
<400> 9633
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Gln Glu Trp Thr Met Asn Thr Glu Gln Leu Met Thr Leu Cys Gln Arg

10 His His Ala Leu Leu Leu Ala Ser Asp Thr Glu Met Ile Ser Ile Ala 20 25 Val Val Gly Asn Pro Ala Ser Glu Leu Met Glu Ala Leu Arg Phe Ala 40 Thr Gln Lys Arg Ile Asp Ile Glu Cys Trp Thr Ala Glu Arg Met Glu 55 Lys Arg Leu Gln Ser Leu Ser Ser His Leu Pro Gly Ile Val Pro 70 75 Asn Ser Ala Ala Asp Val Leu Ser Thr Thr Leu Gln Gln Ala Val Asn 90 85 Gln Arg Ala Ser Asp Ile His Ile Glu Pro Thr Glu His Gly Tyr Gln 105 Ile Arg Leu Arg Ile Asp Gly Val Leu Tyr Pro Gln Pro Pro Ile Ser 120 Ala Ala Leu Gly Thr Thr Leu Ala Ala Arg Leu Lys Val Leu Gly Gln 135 140 Leu Asp Ile Ala Glu Arg Arg Leu Pro Gln Asp Gly Gln Phe Thr Val 150 155 Glu Leu Ala Ser Val Pro Val Ser Phe Arg Ile Ala Thr Leu Pro Cys 170 165 Ser Gly Gly Glu Lys Ile Val Leu Arg Leu Leu His Gln Val Gln Gln 180 185 Ala Leu Glu Leu Glu Gln Leu Gly Met Ser Ala Asp Gln Gln Ala Arg 200 205 195 Phe Ala Glu Ala Leu Asn Ser Pro Gln Gly Leu Ile Leu Val Thr Gly 220 215 Pro Thr Gly Ser Gly Lys Thr Val Thr Leu Tyr Ser Ala Leu Gln Ala 235 230 Arg Asn Thr Pro Asp Val Asn Ile Cys Ser Val Glu Asp Pro Val Glu 250 245 Ile Pro Leu Ala Gly Leu Asn Gln Thr Gln Ile Asn Pro Arg Ala Gly 265 Leu Thr Phe Gln Ser Val Leu Arg Ala Leu Leu Arg Gln Asp Pro Asp 280 Ile Ile Met Val Gly Glu Ile Arg Asp Gly Glu Thr Ala Glu Ile Ala 295 300 Ile Lys Ala Ala Gln Thr Gly His Leu Val Leu Ser Thr Leu His Thr 315 310 Asn Ser Thr Thr Glu Thr Leu Val Arg Leu Gln Gln Met Gly Val Ala 330 Arg Trp Met Ile Ser Ser Ala Leu Ser Met Val Ile Ala Gln Arg Leu 345 Val Arg Arg Leu Cys Pro Tyr Cys Arg Gln Glu Ala Ser Arg His Thr 360 Glu Leu Pro Arg Thr Leu Trp Pro Arg Pro Leu Pro Arg Trp Gln Pro 375 Thr Gly Cys Asp Arg Cys Tyr His Gly Phe Tyr Gly Arg Val Ala Ile 390 395 Phe Glu Val Leu Val Ile Asp Asp Thr Leu Arg Gln Ala Ile Ala Ser 410 405 Gly Ala Ser Thr Glu Val Ile Gly Ser Ser Ala Arg Gln Ala Gly Met 420 425 Thr Ser Leu Phe Glu His Gly Cys Met Ala Val Glu Gln Gly Leu Thr 440 Thr Leu Glu Glu Leu Leu Arg Val Leu Gly Met Pro Asp Gly Cys 455

<sup>&</sup>lt;210> 9634

<sup>&</sup>lt;211> 279

<sup>&</sup>lt;212> PRT

#### <213> Enterobacter cloacae

<400> 9634 Arg Arg Thr Arg Cys His Cys Ile Gly Cys Cys Ser Ser Ala Arg Ala 10 Val Ser Asp Leu Arg Arg Ala Gly Arg Cys Thr Gly Lys Thr Ile Met 25 Ser Thr His Ile Leu Phe Glu His Pro Leu Asn Glu Lys Met Arg Thr 40 45 Trp Leu Arg Ile Glu Phe Leu Ile Gln Gln Leu Ser Gln His Leu Pro 55 Val Asn Asp His Ala Thr Ala Leu His Phe Phe Arg Asn Val Gly Asp 70 75 Leu Leu Asp Val Ile Glu Arg Gly Asp Val Arg Thr Glu Leu Leu Lys 90 85 Glu Leu Glu Arg Gln Gln Arg Lys Leu Gln Ala Trp Ala Glu Val Pro 100 105 110 Gly Val Asp Gln Ser Arg Ile Asp Ala Leu Arg Gln Gln Leu Lys Asn 115 120 Ser Ser Thr Thr Leu Met Ala Ala Pro Arg Val Gly Gln Phe Leu Arg 135 140 Glu Asp Arg Leu Ile Ala Leu Val Arg Gln Arg Leu Ser Ile Pro Gly 150 155 Gly Cys Cys Ser Phe Asp Leu Pro Thr Leu His Met Trp Leu His Met 165 170 Pro Gln Glu Gln Arg Asp Arg Gln Val Asn Ser Trp Leu Gly Ser Leu 185 190 Glu Pro Met Asn Gln Thr Leu Ser Leu Ile Leu Asp Leu Val Arg Asn 200 Ser Ala Pro Phe Arg Lys Gln Thr Ser Leu Asn Gly Phe Tyr Gln Asp 215 220 Asn Gly Asp Asp Ala Asp Leu Leu Arg Leu Asn Leu Ser Leu Ser Glu 230 235 Gln Leu Tyr Pro Gln Ile Ser Gly His Lys Ser Arg Phe Ala Ile Arg 250 Phe Met Pro Leu Asp Ser Glu His Gly Thr Val Pro Glu Arg Leu Asp 265 Phe Glu Leu Ala Cys Cys 275 <210> 9635 <211> 68 <212> PRT <213> Enterobacter cloacae <400> 9635 Gly Val Pro Met Ser Asp Val Thr Thr Val Asn Cys Pro Thr Cys Gly 10 Lys Thr Val Val Trp Gly Glu Val Ser Pro Phe Arg Pro Phe Cys Cys 20 25 Lys Arg Cys Gln Leu Ile Asp Leu Gly Glu Trp Ala Ala Glu Glu Lys 40

Arg Ile Pro Ser Glu Gly Asp Leu Ser Asp Ser Asp Trp Ser Glu

55

<210> 9636

Asn Gln Gln

<211> 913

<212> PRT

<213> Enterobacter cloacae

<400> 9636 Met Arg Gly Ser Phe Gln Pro Arg Val Arg Leu Leu Leu Ile Lys Leu 10 Leu Thr Arg Val Phe Gly Ser Arg Asn Asp Arg Thr Leu Arg Arg Met 25 Arg Lys Ala Val Asn Val Ile Asn Gly Met Glu Pro Ala Met Glu Lys Leu Ser Asp Asp Glu Leu Lys Ala Lys Thr Ala Glu Phe Arg Ala Arg Leu Glu Lys Gly Glu Thr Leu Glu Ser Leu Ile Pro Glu Ala Phe Ala 75 Val Val Arg Glu Ala Ser Lys Arg Val Phe Gly Met Arg His Phe Asp 90 85 Val Gln Leu Leu Gly Gly Met Val Leu Asn Glu Arg Cys Ile Ala Glu 100 105 Met Arg Thr Gly Glu Gly Lys Thr Leu Thr Ala Thr Leu Pro Ala Tyr 120 Leu Asn Ala Leu Thr Gly Lys Gly Val His Val Val Thr Val Asn Asp 135 140 Tyr Leu Ala Gln Arg Asp Ala Glu Asn Asn Arg Pro Leu Phe Glu Phe 150 155 Leu Gly Met Thr Val Gly Ile Asn Met Ser Gly Leu Pro Ala Pro Ala 165 170 Lys Arg Glu Ala Tyr Asn Ala Asp Ile Thr Tyr Gly Thr Asn Asn Glu 180 185 Tyr Gly Phe Asp Tyr Leu Arg Asp Asn Met Ala Phe Ser Pro Glu Glu 200 Arg Val Gln Arg Lys Leu His Tyr Ala Leu Val Asp Glu Val Asp Ser 215 220 Ile Leu Ile Asp Glu Ala Arg Thr Pro Leu Ile Ile Ser Gly Pro Ala 230 235 Glu Asp Ser Ser Glu Met Tyr Arg Lys Val Asp Lys Ile Ile Pro His 245 250 Leu Leu Arg Gln Glu Lys Glu Asp Ser Asp Thr Phe Gln Gly Glu Gly 265 His Phe Ser Val Asp Glu Lys Ala Arg Gln Val Asn Leu Thr Glu Arg 280 Gly Leu Val Lys Ile Glu Glu Leu Leu Val Ala Glu Gly Ile Met Glu 295 Glu Gly Glu Ser Leu Tyr Ser Pro Ser Asn Ile Met Leu Met His His 310 315 Val Thr Ala Ala Leu Arg Ala His Ala Leu Phe Thr Arg Asp Val Asp 325 330 Tyr Ile Val Lys Asp Gly Glu Val Ile Ile Val Asp Glu His Thr Gly 345 Arg Thr Met Gln Gly Arg Arg Trp Ser Asp Gly Leu His Gln Ala Val 360 Glu Ala Lys Glu Gly Val Asp Ile Gln Asn Glu Asn Gln Thr Leu Ala 375 380 Ser Ile Thr Phe Gln Asn Tyr Phe Arg Leu Tyr Glu Lys Leu Ala Gly 395 390 Met Thr Gly Thr Ala Asp Thr Glu Ala Phe Glu Phe Ser Ser Ile Tyr 405 410 Lys Leu Asp Thr Val Val Val Pro Thr Asn Arg Pro Met Ile Arg Lys 420 425 430 Asp Met Pro Asp Leu Val Tyr Met Thr Glu Ala Glu Lys Ile Gln Ala 440 Ile Ile Glu Asp Ile Arg Glu Arg Thr Ala Lys Gly Gln Pro Val Leu 455 460 Val Gly Thr Ile Ser Ile Glu Lys Ser Glu Val Val Ser Asn Glu Leu

465					470					475					480
Thr	Lys	Ala	Gly	Ile 485	Lys	His	Asn	Val	Leu 490	Asn	Ala	Lys	Phe	His 495	Ala
_			500			Ala		505					510		
		515				Gly	520					525			
	530					Ala 535					540		•		
545					550					555					Leu 560
		-	-	565		Ile		_	570		_			575	_
			580			Arg		585					590		
_		595	_		_	Leu	600					605			
	610					Ser 615		•			620				
625	_				630	His				635					640
		-		645		Ser			650					655	
			660			Ala		665					670		
	_	675				Asp	680					685			
	690	_		_		Phe 695	-				700				
705					710	Met				715					720
				725		Leu			730					735	
			740			Glu		745					750		
		755				Lys	760					765			
	770	_				Lys 775	_				780				
785	-	_			790	Ala			_	795					800
				805		Gln			810					815	
			820					825					830		Glu
		835				Lys	840					845		•	
	850					855	_				860	_			Gln
865					870	Gln		-		875					880
				885		Asp			890					895	
Pro	Cys	Gly	Ser 900	Gly	Lys	Lys	Tyr	Lys 905	Ala	Cys	His	Gly	Arg 910	Leu	Ser

<sup>&</sup>lt;210> 9637 <211> 150 <212> PRT

#### <213> Enterobacter cloacae

<400> 9637 Glu His Asn Lys Leu Lys Arg Arg Arg Tyr Leu Arg Leu Phe Tyr Gly 10 Ser Asp Met Met Lys Thr Leu Gln Ile Ala Val Gly Ile Ile Arg Asn 25 Pro Gln Asn Gln Ile Phe Ile Thr Gln Arg Ala Ala Asp Ala His Met Ala Asn Lys Trp Glu Phe Pro Gly Gly Lys Ile Glu Ser Gly Glu Thr 55 Pro Glu Gln Ala Leu Val Arg Glu Leu Gln Glu Glu Val Gly Ile Thr 75 Pro Leu Gly Ala Thr Leu Phe Asp Lys Leu Glu Tyr Gln Phe Pro Asp 90 Arg His Ile Thr Leu Trp Phe Trp Leu Val Glu Ser Trp Glu Gly Glu 105 Pro Trp Gly Lys Glu Gly Gln Pro Gly Gly Trp Val Thr Leu His Ala 115 120 Ser Asp Ala Glu Lys Phe Pro Pro Ala Asn Ala Pro Val Ile Ser Arg 135 130

Leu Thr Gly Asn Leu 145 150

<210> 9638 <211> 366 <212> PRT

<213> Enterobacter cloacae

<400> 9638 Arg His Trp Ser Cys Ala Phe Asn Ile Phe Ala Ser Asn Pro Arg Asn Pro His Met Arg Ile Glu Glu Asp Leu Lys Leu Gly Phe Lys Asp Val Leu Ile Arg Pro Lys Arg Ser Thr Leu Lys Ser Arg Ser Asp Val Glu 40 Leu Glu Arg Gln Phe Thr Phe Lys His Ser Gly Gln Thr Trp Ser Gly Val Pro Ile Ile Ala Ala Asn Met Asp Thr Val Gly Thr Phe Glu Met Ala Thr Ala Leu Ala Gln Phe Asp Ile Leu Thr Ala Val His Lys His Tyr Ser Ala Glu Glu Trp Asp Ala Phe Val Ala Ser Ala Ser Ala Glu 100 105 Val Val Lys His Val Met Val Ser Thr Gly Thr Ser Asp Ala Asp Phe 115 120 125 Glu Lys Thr Lys Gln Ile Leu Asn Ala Asn Pro Ala Leu Asn Phe Val 135 140 Cys Ile Asp Val Ala Asn Gly Tyr Ser Glu His Phe Val Gln Phe Val 150 155 Ser Lys Ala Arg Glu Ala Trp Pro Thr Lys Thr Ile Ile Ala Gly Asn 170 165 Val Val Thr Gly Glu Met Cys Glu Glu Leu Ile Leu Ser Gly Ala Asp 180 185 190 Ile Val Lys Val Gly Ile Gly Pro Gly Ser Val Cys Thr Thr Arg Val 200 205 Lys Thr Gly Val Gly Tyr Pro Gln Leu Ser Ala Val Ile Glu Cys Ala 215 220 Asp Ala Ala His Gly Leu Gly Gly Gln Ile Ile Ser Asp Gly Gly Cys 230 235

Thr Met Pro Gly Asp Val Ala Lys Ala Phe Gly Gly Gly Ala Asp Phe

250 245 Val Met Leu Gly Gly Met Leu Ala Gly His Glu Glu Ser Gly Gly Thr 270 260 265 Val Val Glu Glu Asn Gly Glu Lys Phe Met Leu Phe Tyr Gly Met Ser 280 285 Ser Glu Ser Ala Met Thr Arg His Val Gly Gly Val Ala Lys Tyr Arg 295 300 Ala Ala Glu Gly Lys Thr Val Lys Leu Pro Leu Arg Gly Pro Val Glu 310 315 Asn Thr Ala Arg Asp Ile Leu Gly Gly Leu Arg Ser Ala Cys Thr Tyr 325 330 Val Gly Ala Ser Arg Leu Lys Glu Leu Thr Lys Arg Thr Thr Phe Ile 345 Arg Val Gln Glu Gln Glu Asn Arg Val Phe Asn Ser Leu 360 <210> 9639 <211> 193 <212> PRT <213> Enterobacter cloacae

<400> 9639 Ile Arg Ser Ser Ser Met Leu Leu Glu Asn Gly Trp Leu Val Asp Ala Arg His Val Pro Ser Pro His His Asp Cys Arg Pro Glu Asp Glu Lys 20 25 Pro Thr Leu Leu Val Val His Asn Ile Ser Leu Pro Pro Gly Glu Phe 40 Gly Gly Pro Trp Ile Asp Ala Leu Phe Thr Gly Thr Ile Asp Pro Asp 55 Ala His Pro Phe Phe Ala Glu Ile Ala His Leu Arg Val Ser Ala His 70 75 Cys Leu Ile Arg Arg Asp Gly Glu Val Val Gln Tyr Val Pro Phe Asp 90 Lys Arg Ala Trp His Ala Gly Val Ser Lys Tyr Gln Gly Arg Glu Arg 100 105 Cys Asn Asp Phe Ser Ile Gly Ile Glu Leu Glu Gly Thr Asp Thr Thr 120 Pro Tyr Thr Asp Ala Gln Tyr Glu Lys Leu Val Ala Val Thr Gln Thr 135 140 Leu Ile Gly Arg Tyr Pro Ala Ile Ala Asp Asn Ile Thr Gly His Ser 150 155 Asp Ile Ala Pro Glu Arg Lys Thr Asp Pro Gly Pro Ala Phe Asp Trp 165 170 Ser Arg Phe His Ala Met Leu Thr Thr Ser Ser Asp Lys Glu Ile Thr

<210> 9640 <211> 881 <212> PRT <213> Enterobacter cloacae

185

Leu Lys Asn Pro Pro Glu Gly Glu Glu Glu Phe Leu Leu Asp Leu Leu 55 60 Ile Asn Arg Val Pro Pro Gly Val Asp Glu Ala Ala Tyr Val Lys Ala 70 75 Gly Phe Leu Ala Ala Val Ala Lys Gly Glu Ala Thr Ser Pro Leu Val 90 85 Thr Pro Glu Lys Ala Ile Glu Leu Leu Gly Thr Met Gln Gly Gly Tyr 105 Asn Ile His Pro Leu Ile Asp Ala Leu Asp Asn Asp Lys Leu Ala Pro 120 Ile Ala Ala Lys Ala Leu Ser Ser Thr Leu Leu Met Phe Asp Asn Phe 135 140 Tyr Asp Val Glu Glu Lys Ala Lys Ala Gly Asn Val Tyr Ala Lys Gln 150 155 Val Met Gln Ser Trp Ala Asp Ala Glu Trp Phe Leu Asn Arg Pro Gln 170 165 Leu Ala Glu Lys Ile Thr Val Thr Val Phe Lys Val Thr Gly Glu Thr 185 190 180 Asn Thr Asp Asp Leu Ser Pro Ala Pro Asp Ala Trp Ser Arg Pro Asp 200 205 Ile Pro Leu His Ala Leu Ala Met Leu Lys Asn Ala Arg Glu Gly Ile 215 220 Glu Pro Asp Gln Pro Gly Ser Val Gly Pro Ile Lys Gln Ile Glu Ala 230 235 Leu Gln Gln Lys Gly Phe Pro Leu Ala Tyr Val Gly Asp Val Val Gly 245 250 Thr Gly Ser Ser Arg Lys Ser Ala Thr Asn Ser Val Leu Trp Phe Met 260 265 Gly Asp Asp Ile Pro His Val Pro Asn Lys Arg Gly Gly Leu Cys 280 285 Leu Gly Gly Lys Ile Ala Pro Ile Phe Phe Asn Thr Met Glu Asp Ala 295 Gly Ala Leu Pro Ile Glu Val Asp Val Ser Asn Leu Asn Met Gly Asp 310 Val Ile Asp Val Tyr Pro Tyr Lys Gly Glu Val Arg Asn His Glu Thr 325 330 Asn Glu Leu Leu Ala Ser Phe Glu Leu Lys Thr Asp Val Leu Ile Asp , 345 Glu Val Arg Ala Gly Gly Arg Ile Pro Leu Ile Ile Gly Arg Gly Leu 360 Thr Thr Lys Ala Arg Glu Ala Leu Gly Leu Pro His Ser Asp Val Phe . 380 375 Arg Gln Ala Lys Asp Val Ala Glu Ser Asn Arg Gly Phe Ser Leu Ala 390 395 Gln Lys Met Val Gly Arg Ala Cys Gly Val Ala Gly Ile Arg Pro Gly 405 410 Ala Tyr Cys Glu Pro Lys Met Thr Ser Val Gly Ser Gln Asp Thr Thr 425 430 420 Gly Pro Met Thr Arg Asp Glu Leu Lys Asp Leu Ala Cys Leu Gly Phe 440 Ser Ser Asp Leu Val Met Gln Ser Phe Cys His Thr Ala Ala Tyr Pro 460 455 Lys Pro Val Asp Val Thr Thr His His Thr Leu Pro Asp Phe Ile Met 470 475 Asn Arg Gly Val Ser Leu Arg Pro Gly Asp Gly Val Ile His Ser 485 490 Trp Leu Asn Arg Met Leu Leu Pro Asp Thr Val Gly Thr Gly Gly Asp 505 Ser His Thr Arg Phe Pro Ile Gly Ile Ser Phe Pro Ala Gly Ser Gly 520 Leu Val Ala Phe Ala Ala Ala Thr Gly Val Met Pro Leu Asp Met Pro

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535
                                            540
Glu Ser Val Leu Val Arg Phe Lys Gly Lys Met Gln Pro Gly Ile Thr
                   550
                                555
Leu Arg Asp Leu Val His Ala Ile Pro Leu Tyr Ala Ile Lys Gln Gly
                                    570
               565
Leu Leu Thr Val Glu Lys Lys Gly Lys Lys Asn Ile Phe Ser Gly Arg
                                585
Ile Leu Glu Ile Glu Gly Leu Pro Asp Leu Lys Val Glu Gln Ala Phe
                            600
Glu Leu Thr Asp Ala Ser Ala Glu Arg Ser Ala Ala Gly Cys Thr Ile
                        615
                                            620
Lys Leu Asn Lys Glu Pro Ile Ile Glu Tyr Leu Asn Ser Asn Ile Val
                    630
                                        635
Leu Leu Lys Trp Met Ile Ala Glu Gly Tyr Gly Asp Arg Arg Thr Leu
                645
                                    650
Glu Arg Arg Ile Gln Gly Met Glu Lys Trp Leu Ala Asp Pro Gln Leu.
            660
                                665
Leu Glu Ala Asp Ala Asp Ala Glu Tyr Ala Ala Val Ile Asp Ile Asp
                            680
Leu Ala Asp Ile Lys Glu Pro Ile Leu Cys Ala Pro Asn Asp Pro Asp
                                            700
                        695
Asp Ala Arg Pro Leu Ser Glu Val Gln Gly Glu Lys Ile Asp Glu Val
                    710
                                        715
Phe Ile Gly Ser Cys Met Thr Asn Ile Gly His Phe Arg Ala Ala Gly
                725
                                    730
Lys Leu Leu Asp Thr His Lys Gly Gln Leu Pro Thr Arg Leu Trp Val
                                745
            740
Ala Pro Pro Thr Arg Met Asp Ala Ala Gln Leu Thr Glu Glu Gly Tyr
                            760
                                                765
Tyr Ser Val Phe Gly Lys Ser Gly Ala Arg Ile Glu Ile Pro Gly Cys
                        775
                                            780
Ser Leu Cys Met Gly Asn Gln Ala Arg Val Ala Asp Gly Ala Thr Val
                    790
                                        795
Val Ser Thr Ser Thr Arg Asn Phe Pro Asn Arg Leu Gly Thr Gly Ala
                805
                                    810
                                                        815
Asn Val Phe Leu Ala Ser Ala Glu Leu Ala Ala Val Ala Ala Leu Ile
                                825
Gly Lys Leu Pro Thr Pro Glu Glu Tyr Gln Thr Phe Val Ala Gln Val
                            840
Asp Lys Thr Ala Val Asp Thr Tyr Arg Tyr Leu Asn Phe Asp Gln Leu
                        855
Ser Gln Tyr Thr Glu Lys Ala Asp Gly Val Ile Phe Gln Thr Ala Val
                    870
                                        875
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<210> 9641
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#### <400> 9641

<sup>&</sup>lt;211> 185

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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5216
                    70
                                        75
Ser Thr Thr Arg Asp Val Lys Ile Leu Lys Asp Leu Asp Glu Asp Ile
               85
                                    90
Arg Gly Lys Asp Val Leu Ile Val Glu Asp Ile Ile Asp Ser Gly Asn
           100
                               105
Thr Leu Ser Lys Val Arg Glu Ile Leu Ser Leu Arg Glu Pro Lys Ser
                           120
                                                125
Leu Ala Ile Cys Thr Leu Leu Asp Lys Pro Glu Arg Arg Glu Val Gln
                        135
Val Pro Val Glu Phe Val Gly Phe Ser Ile Pro Asp Glu Phe Val Val
                   150
                                        155
Gly Tyr Gly Ile Asp Tyr Ala Gln Arg Tyr Arg His Leu Pro Tyr Val
               165
                                    170
Gly Lys Val Val Ile Leu Asp Glu
            180
                                185
<210> 9642
<211> 312
<212> PRT
<213> Enterobacter cloacae
<400> 9642
Val Glu Phe Met Ala Ile Ala Leu Glu Leu Glu Gln Leu Lys Lys Thr
Tyr Pro Gly Gly Val Gln Ala Leu Arg Gly Ile Asp Leu Lys Val Glu
            20
                                25
Ala Gly Asp Phe Tyr Ala Leu Leu Gly Pro Asn Gly Ala Gly Lys Ser
       35
                            40
Thr Thr Ile Gly Ile Ile Ser Ser Leu Val Asn Lys Thr Ser Gly Arg
                                . 60
                        55
Val Ser Val Phe Gly Tyr Asp Leu Gln Lys Asp Val Val Asn Ala Lys
                    70
                                        75
Arg Gln Leu Gly Leu Val Pro Gln Glu Phe Asn Phe Asn Pro Phe Glu
                                    90
Thr Val Gln Gln Ile Val Val Asn Gln Ala Gly Tyr Tyr Gly Val Glu
            100
                                105
                                                    110
Arg Lys Glu Ala Leu Glu Arg Ser Glu Lys Tyr Leu Lys Gln Leu Asp
                            120
Leu Trp Glu Lys Arg Asn Glu Arg Ala Arg Met Leu Ser Gly Gly Met
                        135
Lys Arg Arg Leu Met Ile Ala Arg Ala Leu Met His Glu Pro Lys Leu
                    150
                                        155
Leu Ile Leu Asp Glu Pro Thr Ala Gly Val Asp Ile Glu Leu Arg Arg
               165
                                    170
Ser Met Trp Gly Phe Leu Lys Asp Leu Asn Asp Lys Gly Thr Thr Ile
            180
                                185
Ile Leu Thr Thr His Tyr Leu Glu Glu Ala Glu Met Leu Cys Arg Asn
                            200
                                                205
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 Ile Gly Ile Ile Gln His Gly Glu Leu Val Glu Asn Thr Ser Met Lys

 210
 215
 220

 Asn Leu Leu Ser Lys Leu Lys Ser Glu Thr Phe Ile Leu Asp Leu Ala
 225
 235

225 230 235 240
Ala Lys Ser Ala Leu Pro Lys Leu Glu Gly Tyr Asn Tyr Arg Leu Val

245 250 255
Asp Thr Ser Thr Leu Glu Val Glu Val Leu Arg Glu Gln Gly Ile Asn
260 265 270

260 265 270

Ser Val Phe Ser Gln Leu Ser Ala Gln Gly Ile Gln Val Leu Ser Met
275 280 285

Arg Asn Lys Ala Asn Arg Leu Glu Glu Leu Phe Val Ser Leu Val His 290 295 300

Asp Lys Gln Gly Asp Lys Ala

120

135

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<210> 9643
<211> 156
<212> PRT
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<213> Enterobacter cloacae <400> 9643

Thr Thr Arg Leu Leu Arg Arg Asp Val Met Leu Gly Trp Val Ile Thr Cys His Asp Glu Glu Ala Gln Glu Met Leu Leu Lys Leu Glu Ala Arg

Phe Gly Pro Leu Ala Gln Cys Arg Ala Val Asn Tyr Trp Arg Gly Leu 40 Ser Thr Asn Met Leu Ser Arg Met Met Cys Asp Ala Leu His Glu Thr 5.5

70

Pro Tyr Arg Ser Ala Ala Leu Met Ser His Lys His Asp Asn Cys Glu 85

100

Pro Phe Val Leu Leu His Asp Leu Tyr Lys His

150 <210> 9644

<211> 437 <212> PRT

<213> Enterobacter cloacae

<400> 9644

Val Gly Asn Ala Val Val Asn Val Gly Asn Val Arg Ala Gly Gln Ile 70

100 115

135 Ser Ser Gly Ser Ala Pro Phe Gly Thr Leu Ser Ala Asn Leu Arg Tyr

Glu Asp Asn Gly Leu Pro Val Leu Thr Tyr His His Ile Leu Arg Asp 200

25

Asp Thr Gly Asp Gly Val Ile Phe Leu Thr Asp Lys Ser Gly Ala Ala 75

90 Val Ile Ser Gly Ile Ser Leu Pro Leu Leu Glu Ala Met Tyr Pro Leu

105 110 Arg Ala Thr Leu Ser Ser Ala Glu Phe Arg His Ala Ile Val Ala Gln

Gly Ser Pro Gly Val Ser Ser Leu Trp His Gln Gln Lys Asn Pro

Thr Leu Val Leu Met Ser Leu Leu Gln Trp Arg Leu Ile Phe Arg

Ile Asp Leu Tyr Pro Met Leu Met Arg Val Ile Phe Ile Leu Leu Val

Leu Val Ser Gly Gly Ala Ser Ala Ser Leu Thr Ser Gln Gln Gly Leu

Pro Ala Gln Tyr Met Gln Thr Thr Glu Asp Ala Ala Ile Trp Ala Gln

75 Leu Ala Val Phe Pro Ala Ala Asp Tyr Tyr Glu Phe Arg Phe Gly

90 Phe Gly Thr Gly Phe Ile Asp Lys Asp His Leu Glu Lys Val Gln Gly 105

Lys Gln Arg Val Glu Asp Ser Leu Gly Asp Leu Asn Lys Pro Leu Ser 120 125

Asn Gln Asn Leu Ile Thr Trp Lys Asp Thr Pro Val Tyr Asn Ala Pro 140

150 155 Pro Ile Leu Asn Lys Leu Lys Asp Arg Leu Asn Gln Thr Trp Phe Gln

170 Ile Arg Ile Gly Asn Arg Leu Ala Trp Ile Ser Ser Leu Asp Ala Gln 185

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Glu Glu Asn Thr Arg Phe Arg His Thr Ser Thr Thr Thr Ser Val Arg
                       215
                                            220
Ala Phe Asn Asn Gln Met Ala Trp Leu Arg Asp Gln Gly Tyr Thr Thr
                   230
                                        235
Leu Thr Met Tyr Gln Leu Glu Gly Tyr Val Arg Asn Lys Met Asn Leu
               245
                                    250
Pro Ala Lys Ala Val Val Ile Thr Phe Asp Asp Gly Leu Lys Ser Val
                                265
Ser Arg Tyr Ala Tyr Pro Val Leu Lys Glu Tyr Gly Phe Asn Ala Thr
                            280
Ala Phe Ile Ile Ser Ser Arg Ile Lys Gly His Pro Gln Lys Trp Asp
                        295
                                            300
Pro Lys Ser Leu Gln Phe Met Ser Val Gln Glu Ile Lys Gly Ile Gln
                    310
                                        315
Asp Val Phe Asp Ile Gln Ser His Thr His Phe Leu His Arg Val Asp
                325
                                    330
Gly Tyr Lys His Pro Ile Leu Leu Ser Arg Ser Tyr His Val Ile Leu
                                345
            340
Phe Asp Phe Glu Arg Ser Arg Ala Leu Ala Gln Phe Asn Pro Arg
                            360
Val Leu Tyr Val Ser Tyr Pro Phe Gly Gly Tyr Asp Asn Lys Ala Ile
                        375
                                            380
Lys Ala Ala Asn Asp Ala Gly Phe His Leu Ala Val Thr Thr Met Lys
                    390
                                        395
Gly Lys Val Lys Pro Gly Asp Asn Pro Phe Leu Leu Lys Arg Leu Tyr
               405
                                    410
Ile Leu Arg Thr Asp Ser Leu Glu Thr Met Ser Arg Leu Ile Ser Asn
            420
                                425
Gln Pro Gln Gly
       435
<210> 9645
<211> 173
<212> PRT
<213> Enterobacter cloacae
<400> 9645
Gln Gly Gly Arg Asp Ser Arg Leu Ser Arg Val Val Arg Gly Gln Ala
                                    10
Leu Ala Ser His Leu Phe Phe Ala Asp Phe Cys Gln Arg Phe Thr Val
Asp Ala Gln Ile Gly Cys Trp Thr Arg Phe Gln Ala Thr Asn Thr Asp
                            40
Phe Asn Thr Ala Gly Phe Ala Val Ala Lys Ile Phe Val Leu Asp Leu
Leu Gln Arg Phe Phe Asp Leu Phe Asp Gln Phe Ala Leu Ala Val Thr
                    70
                                        75
Val Thr Gln Phe Glu Ala Glu Leu Phe Phe Leu Ser Gly Thr Val Asp
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 Ile Asp Phe Ile Pro Glu Leu Ile Thr Pro Cys Phe Lys Asn Thr Leu 115
 120
 125

 Glu Val Arg Gln Leu Gly Phe Val His Ile Leu Phe Ala Arg Leu Leu 130
 135
 140

 Leu Ile Arg Leu His Pro Ser Asp Gly Glu Asn Thr Gln Gly Arg Cys 145
 150
 155
 160

 Phe Thr Val Leu Pro Phe Leu His Val Ala Ser Pro

Arg Val Arg Glu Val Ser Ser Phe Val Leu His Met Cys Asn Gly Ala

105

90

110

85

<211> 643 <212> PRT <213> Enterobacter cloacae

<400> 9646 Pro Ala Ser Gly Val Arg Gly Lys Arg Ile Met Ala Ile Glu Ile Asn Val Pro Asp Ile Gly Ala Asp Glu Val Glu Ile Thr Glu Ile Leu Val 25 Lys Val Gly Asp Lys Val Glu Ala Glu Gln Ser Leu Ile Thr Val Glu Gly Asp Lys Ala Ser Met Glu Val Pro Ser Pro Gln Ala Gly Ile Val 55 60 Lys Glu Ile Lys Val Ser Val Gly Asp Lys Thr Glu Thr Gly Lys Leu 75 70 Ile Met Ile Phe Asp Ser Ala Asp Gly Ala Ala Ala Ala Pro Ala 85 90 Gln Glu Glu Lys Lys Glu Ala Ala Pro Ala Ala Pro Ala Ala Ala 100 105 Ala Ala Ala Lys Glu Val Asn Val Pro Asp Ile Gly Gly Asp Glu Val 120 125 Glu Val Thr Glu Ile Leu Val Lys Val Gly Asp Thr Val Ala Ala Glu 135 Gln Ser Leu Ile Thr Val Glu Gly Asp Lys Ala Ser Met Glu Val Pro 150 Ala Pro Phe Ala Gly Thr Val Lys Glu Ile Lys Ile Asn Thr Gly Asp 170 Lys Val Ser Thr Gly Ser Leu Ile Met Ile Phe Glu Val Ala Gly Ser Glu Gly Ala Ala Ala Pro Ala Lys Ala Glu Ala Ala Pro Ala Pro Ala 200 Ala Ala Pro Ala Ala Gly Gly Val Lys Asp Val Asn Val Pro Asp 215 Ile Gly Gly Asp Glu Val Glu Val Thr Glu Val Met Val Lys Val Gly 230 Asp Lys Val Ala Ala Glu Gln Ser Leu Ile Thr Val Glu Gly Asp Lys 245 250 Ala Ser Met Glu Val Pro Ala Pro Phe Ala Gly Thr Val Lys Glu Ile 265 260 Lys Ile Ser Thr Gly Asp Lys Val Ser Thr Gly Ser Leu Ile Met Val 275 280 Phe Glu Val Glu Gly Ala Ala Pro Ala Ala Pro Ala Ala Ala Ala 300 -295 Ala Pro Ala Pro Ala Ala Pro Ala Gln Ala Ala Lys Pro Ala Ala 310 315 Ala Pro Ala Ala Lys Ala Glu Lys Ser Glu Phe Ala Glu Asn Asp Ala 325 330 Tyr Val His Ala Thr Pro Leu Ile Arg Arg Leu Ala Arg Glu Phe Gly 340 345 Val Asn Leu Ala Lys Val Lys Gly Thr Gly Arg Lys Gly Arg Ile Leu 360 365 Arg Glu Asp Val Gln Ala Tyr Val Lys Asp Ala Val Lys Arg Ala Glu 375 380 Ala Ala Pro Ala Ala Ala Gly Gly Gly Ile Pro Gly Met Leu Pro 390 395 Trp Pro Lys Val Asp Phe Ser Lys Phe Gly Glu Ile Glu Glu Val Glu 410 Leu Gly Arg Ile Gln Lys Ile Ser Gly Ala Asn Leu Ser Arg Asn Trp 425 Val Met Ile Pro His Val Thr His Phe Asp Lys Thr Asp Ile Thr Asp





# 5220

Leu Glu Ala Phe Arg Lys Gln Gln Asn Ala Glu Ala Glu Lys Arg Lys 455 Leu Asp Val Lys Phe Thr Pro Val Val Phe Ile Met Lys Ala Val Ala 470 475 Ala Ala Leu Glu Gln Met Pro Arg Phe Asn Ser Ser Leu Ser Glu Asp 485 490 Gly Gln Lys Leu Thr Leu Lys Lys Tyr Ile Asn Ile Gly Val Ala Val 505 Asp Thr Pro Asn Gly Leu Val Val Pro Val Phe Lys Asp Val Asn Lys 520 525 Lys Ser Val Thr Glu Leu Ser Arg Glu Leu Thr Thr Ile Ser Lys Lys 530 535 540 Ala Arg Asp Gly Lys Leu Thr Ala Gly Glu Met Gln Gly Gly Cys Phe 550 555 Thr Ile Ser Ser Ile Gly Gly Leu Gly Thr Thr His Phe Ala Pro Ile 570 565 Val Asn Ala Pro Glu Val Ala Ile Leu Gly Val Ser Lys Ser Ala Met 580 585 590 Glu Pro Val Trp Asn Gly Lys Glu Phe Val Pro Arg Leu Met Met Pro 600 Ile Ser Leu Ser Phe Asp His Arg Val Ile Asp Gly Ala Asp Gly Ala 615 620 Arg Phe Ile Thr Ile Ile Asn Asn Met Leu Ser Asp Ile Arg Arg Leu 630 635 Val Met

<210> 9647

<211> 161

<212> PRT

<213> Enterobacter cloacae

# <400> 9647

Gly His Gln Ala Ala Gly Ser Cys Ser His Leu Phe Ile Phe Ile Pro 10 Pro Thr Ser Pro Ala Phe Phe Leu Pro Arg Cys Cys Asp Asn Tyr Leu 25 Asn Gly Phe Ala Glu Glu Asn Ala Met Asp Tyr Glu Phe Leu Arg Asp 35 . Ile Thr Gly Val Val Lys Val Arg Met Ser Met Gly His Glu Ala Val 55 60 Gly His Trp Phe Asn Glu Glu Val Lys Glu Asn Leu Ala Leu Leu Asp 70 75 Glu Val Glu Gln Ala Ala Glu Thr Val Lys Gly Ser Glu Arg Ser Trp 90 Gln Arg Ala Gly His Glu Tyr Thr Leu Trp Met Asp Gly Glu Glu Val 100 105 110 Met Val Arg Ala Asn Gln Leu Glu Leu Ser Gly Asp Glu Met Glu Glu 120 125 Gly Met Ser Tyr Tyr Asp Glu Glu Ser Leu Ser Leu Cys Gly Val Glu 135 140 Asp Phe Leu Ser Val Val Asn Ala Tyr Arg Asp Phe Met Lys Gln Lys

155

<sup>&</sup>lt;210> 9648

<sup>&</sup>lt;211> 810

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<400> 9648 Val Ser Ser Leu Pro Val Ala Val Val Leu Pro Glu Leu Leu Ala Ala 10 Leu Glu His Ala Pro Gln Val Leu Leu Ser Ala Pro Thr Gly Ala Gly 25 Lys Ser Thr Trp Leu Pro Leu Gln Ile Leu Arg Asp Gly Asn Ile Ser 40 Gly Lys Ile Ile Leu Leu Glu Pro Arg Arg Leu Ala Ala Arg Asn Val Ala Gln Arg Leu Ala Glu Leu Leu Asn Glu Lys Pro Gly Glu Thr Val 70 75 Gly Tyr Arg Met Arg Ala Glu Thr Cys Val Gly Pro Ser Thr Arg Leu 90 Glu Val Val Thr Glu Gly Ile Leu Thr Arg Met Leu Gln Asn Asp Pro 100 105 Glu Leu Thr Gly Val Gly Leu Val Ile Leu Asp Glu Phe His Glu Arg 120 Ser Leu Gln Ala Asp Leu Ala Leu Leu Leu Leu Asp Val Gln Gln 135 140 Gly Leu Arg Asp Asp Leu Arg Leu Leu Ile Met Ser Ala Thr Leu Asp 150 155 Asn Glu Arg Leu Arg Gln Thr Leu Pro Asp Ala Pro Met Ile Ser Ser 165 170 Glu Gly Arg Ala Phe Pro Val Glu Arg Arg Tyr Gln Pro Leu Pro Ala 180 185 His Gln Arg Phe Asp Glu Ala Val Ala Ile Ala Thr Ala Glu Leu Leu 200 Arg Gln Glu Pro Gly Ser Leu Leu Phe Leu Pro Gly Val Gly Glu 215 Ile Gln Arg Val Gln Glu Gln Leu Ala Ser Arg Val Asp Ser Asp Val 235 Met Leu Cys Pro Leu Tyr Gly Ala Leu Pro Leu Ala Asp Gln Arg Lys 245 250 Ala Ile Leu Pro Ala Pro Ala Gly Gln Arg Lys Val Val Leu Ala Thr 265 Asn Ile Ala Glu Thr Ser Leu Thr Ile Glu Gly Ile Arg Leu Val Val 280 Asp Ser Thr Leu Glu Arg Val Ala Ser Phe Asp Pro Arg Ser Gly Leu 295 Thr Arg Leu Leu Thr Gln Arg Ile Ser Gln Ala Ser Met Val Gln Arg 310 315 Ala Gly Arg Ala Gly Arg Leu Glu Pro Gly Ile Cys Leu His Leu Thr 325 330 Ser Ala Glu Gln Ala Glu Arg Ala Ala Phe Gln Ser Thr Pro Glu Ile 345 Leu Gln Ser Asp Leu Ser Gly Leu Val Met Asp Met Met Gln Trp Gly 360 Cys Pro Asp Pro Asp Gln Leu Thr Trp Leu Asn Pro Pro Pro Val Val 375 380 Asn Leu Ser Ala Ala Arg Ser Leu Leu Thr Gln Leu Gly Ala Leu Glu 390 395 Gly Glu Arg Leu Thr Ala Arg Gly Gln Lys Met Ala Ala Leu Gly Asn 405 410 Asp Pro Arg Leu Ala Ala Met Leu Val Ala Ala Gln Gly Asp Asp Glu 420 425 430 Ile Ala Thr Ala Ala Lys Leu Ala Ala Ile Leu Glu Glu Pro Pro Arg 440 Gly Gly Gly Ser Asp Leu Gly Gln Ala Phe Ser Arg His Gln Gly Asn 455 460 Trp Gln Gln Arg Ala Gln Gln Leu Cys Lys Arg Leu Asn Cys Arg Gly 470 475

```
Gly Ser Pro Asp Ser Asp Lys Val Ile Pro Leu Leu Ala Gln Ala Phe
               485
                                    490
Pro Asp Arg Ile Ala Arg Arg Gly Leu Asp Gly Arg Tyr Gln Leu
            500
                                505
                                                    510
Ala Asn Gly Met Gly Ala Met Leu Asp Ser Asp Asp Ala Leu Thr Arg
                            520
                                                525
His Glu Trp Leu Ile Ala Pro Leu Leu Gln Gly Ser His Ser Pro
                        535
                                            540
Asp Ala Arg Ile Leu Gln Ala Val Ala Val Asp Ile Asp Leu Leu Thr
                    550
                                        555
Arg Ala Cys Pro Gln Leu Leu Gln Gln Ser Asp Ile Val Glu Trp Asp
                565
                                    570
Asp Thr Gln Gly Thr Leu Lys Ala Phe Arg Arg Ser Gln Ile Gly Lys
                                585
Leu Thr Leu Gly Thr Lys Pro Leu Ala Lys Pro Ser Glu Glu Leu
                            600
His Gln Ala Met Leu Asn Gly Ile Arg Glu Lys Gly Leu Ser Val Leu
                        615
                                            620
Asn Trp Thr Pro Glu Ala Glu Gln Tyr Arg Ile Arg Leu His Cys Ala
                    630
                                        635
Ala Lys Trp Leu Pro Glu Gln Gly Trp Pro Ala Val Asp Asp Glu Thr
                645
                                    650
Leu Leu Ala Thr Leu Glu Gln Trp Leu Leu Pro Gln Met Ser Gly Val
            660
                                665
His Ser Leu Arg Ala Leu Lys Ala Leu Asp Val Lys Ala Ala Leu Gln
                            680
Asn Leu Leu Asp Trp Ser Leu Arg Gln Arg Leu Asp Ser Glu Leu Pro
                        695
                                            700
Gly His Tyr Thr Val Pro Thr Gly Ser Arg Ile Ala Ile Arg Tyr His
                    710
                                        715
Glu Asp Asn Pro Pro Ala Leu Ala Val Arg Met Gln Glu Met Phe Gly
                725
                                    730
Glu Ala Thr Thr Pro Ser Ile Ala Glu Gly Arg Val Pro Leu Val Leu
            740
                                745
Glu Leu Leu Ser Pro Ala His Arg Pro Leu Gln Ile Thr Arg Asp Leu
        755
                            760
Gly Ala Phe Trp Ala Gly Ser Tyr Arg Glu Val Gln Lys Glu Met Lys
                        775
                                            780
Gly Arg Tyr Pro Lys His Val Trp Pro Asp Asp Pro Ala Asn Thr Ala
                    790
                                        795
Pro Thr Arg Arg Thr Lys Lys Tyr Ser
                805
                                    810
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<210> 9649

<211> 652

<212> PRT

<213> Enterobacter cloacae

## <400> 9649

 Met
 Leu
 Arg
 Arg
 Lys
 Ser
 Met
 Ala
 Gly
 Asp
 Arg
 Glu
 Pro
 Ile
 Gly

 Arg
 Lys
 Gly
 Lys
 Pro
 Thr
 Arg
 Pro
 Ala
 Lys
 Glu
 Lys
 Val
 Ser
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Arg Ser Arg Ile Asp Gly Lys Val Trp Gln Leu Pro Ala Ala Val Tyr 100 105 Gly Arg Met Val Asn Leu Glu Pro Asp Met Ser Ile Ser Lys Asn Glu 120 Met Val Lys Leu Gln Ala Thr Gln Tyr Arg Gln Val Thr Lys Met 135 140 Thr Arg Pro Gly Glu Phe Thr Val Gln Ala Lys Ser Ile Glu Met Ile 150 155 Arg Arg Pro Phe Asp Phe Pro Asp Ser Lys Glu Gly Gln Val Arg Ala 165 170 Arg Leu Thr Phe Asp Gly Asp Arg Leu Glu Thr Ile Glu Asn Met Asp 185 180 Asn Asp Arg Gln Phe Gly Phe Phe Arg Leu Asp Pro Arg Leu Ile Thr 200 Met Leu Ser Ser Ala Asn Gly Glu Gln Arg Leu Phe Val Ala Arg Asn 215 220 Gly Phe Pro Asp Leu Leu Val Asp Thr Leu Leu Ala Thr Glu Asp Arg 230 235 His Phe Tyr Glu His Asp Gly Ile Ser Leu Tyr Ser Ile Gly Arg Ala 245 250 Val Leu Ala Asn Leu Thr Ala Gly Arg Thr Val Gln Gly Ala Ser Thr 260 265 Leu Thr Gln Gln Leu Val Lys Asn Leu Phe Leu Ser Ser Glu Arg Ser 275 280 Tyr Trp Arg Lys Ala Asn Glu Ala Tyr Met Ala Val Leu Met Asp Ala 295 Arg Tyr Ser Lys Asp Arg Ile Leu Glu Leu Tyr Met Asn Glu Val Tyr 310 315 Leu Gly Gln Ser Gly Asp Asn Glu Ile Arg Gly Phe Pro Leu Ala Ser 325 330 Leu Tyr Tyr Phe Gly Arg Pro Val Glu Glu Leu Ser Leu Asp Gln Gln 345 Ala Leu Leu Val Gly Met Val Lys Gly Ala Ser Ile Tyr Asn Pro Trp 360 Arg Asn Pro Lys Leu Ala Leu Glu Arg Arg Asn Leu Val Leu Arg Leu 375 Leu Gln Gln Gln Val Ile Asp Gln Glu Leu Tyr Asp Met Leu Ser 390 Ala Arg Pro Leu Gly Val Gln Pro Arg Gly Gly Val Ile Ser Pro Gln 405 410 Pro Ala Phe Met Gln Met Val Arg Gln Glu Leu Gln Ser Lys Leu Gly 420 425 Asp Lys Val Lys Asp Leu Ser Gly Val Lys Ile Phe Thr Thr Phe Asp 440 Ser Val Ala Gln Asp Ala Ala Glu Lys Ala Ala Val Glu Gly Ile Pro 455 460 Ala Leu Lys Lys Gln Arg Lys Leu Ser Asp Leu Glu Thr Ala Met Val 470 475 Val Val Asp Arg Asn Thr Gly Glu Val Arg Ala Met Val Gly Gly Ala 485 490 Glu Pro Gln Tyr Ala Gly Tyr Asn Arg Ala Met Gln Ala Arg Arg Ser 500 505 510 Ile Gly Ser Leu Ala Lys Pro Ala Thr Tyr Leu Thr Ala Leu Ser Gln 520 525 Pro Asn Leu Tyr Arg Leu Asn Thr Trp Ile Ala Asp Ala Pro Ile Ser 535 540 Leu Arg Gln Pro Asn Gly Gln Val Trp Ser Pro Gln Asn Asp Asp Arg 550 555 Gln Phe Ser Gly Gln Val Met Leu Val Asp Ala Leu Thr Arg Ser Met 570 Asn Val Pro Thr Val Asn Leu Gly Met Ala Leu Gly Leu Pro Ala Ile

580 585 Thr Asp Thr Trp Gln Lys Leu Gly Val Pro Lys Asp Gln Leu His Pro 600 605 Val Pro Ala Met Ile Leu Gly Ala Leu Asn Leu Thr Pro Ile Glu Val 615 620 Ala Gln Ala Phe Gln Thr Ile Ala Ser Gly Gly Asn Arg Ala Arg Val 630 635 Gln Pro Arg Val Leu Ala Arg Ser Pro Arg Ser Ser <210> 9650 <211> 174 <212> PRT <213> Enterobacter cloacae <400> 9650 Gln Arg Ser Gln Pro Val Gly Cys Gln Arg Gly Ser Gly Arg Gly His Ser Val Arg Gly Asn Ser Val Trp Arg Leu Ala Ser Cys Arg Gln Tyr 20 25 Gly His Lys Arg Arg Thr Ser Arg Trp Ala Ile Thr Ile Glu Ser Ala 35 40 Glu Glu Ile Ile Gln Arg Ala Thr Pro Ile Cys Cys Ser Arg Thr Ser 55 Val Ser Val Val Glu Leu Val Trp Arg Val Asp Ser Thr Arg Cys Pro 70 75 Val Cys Ala Ala Leu Met Ala Ile Ser Ala Val Ser Pro Ser Arg Ile 85 90 Ser Pro Thr Ile Met Met Ser Gly Ser Cys Leu Ser Arg Ala Arg Ser 100 105 Thr Leu Trp Lys Val Ser Pro Ala Arg Gly Leu Ile Cys Val Trp Phe 120 125 Lys Pro Ala Ser Gly Ile Ser Thr Gly Ser Ser Thr Leu Gln Ile Leu 135 140 Thr Ser Gly Val Phe Arg Ala Cys Asn Ala Leu Tyr Ser Val Thr Val 150 Phe Pro Leu Pro Val Gly Pro Val Thr Arg Ile Asn Pro 165 170 <210> 9651 <211> 288 <212> PRT <213> Enterobacter cloacae <400> 9651 Gly Asp Asn Met Thr Leu Phe Thr Met Leu Leu Val Met Ile Ala Glu 10 Arg Leu Phe Lys Leu Gly Glu His Trp His Leu Asp His Arg Leu Glu 25 Val Leu Phe Arg Arg Ile Arg His Phe Ser Met Leu Arg Thr Leu Leu 40 45 Met Ala Ala Gly Val Met Ala Ile Thr Phe Leu Leu Arg Ser Leu 55 Tyr Gly Leu Phe Phe Asn Val Pro Leu Leu Val Val Trp Ile Leu Leu 70 75 Gly Val Leu Cys Ile Gly Ala Gly Lys Val Arg Leu His Tyr His Ala 85 90 Tyr Leu Lys Ala Ala Ser Arg Asp Asp Ala His Ala Arg Gly Ala Met 105

Ala Ser Glu Leu Thr Met Ile His Gly Val Pro Pro Asp Cys Asp Glu 115 120 125

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Arg Glu Phe Leu Arg Glu Leu Gln Asn Ala Leu Leu Trp Ile Asn Phe
   130
                       135
                                           140
Arg Tyr Tyr Leu Ala Pro Leu Phe Trp Phe Val Val Gly Gly Pro Trp
                                       155
                   150
Gly Pro Val Leu Leu Met Gly Tyr Ala Phe Leu Arg Ala Trp Gln Thr
               165
                                   170
Trp Leu Ala Arg Tyr Leu Thr Pro His Glu Arg Leu Gln Ser Gly Ile
            180
                                185
Asp Ala Ile Leu His Val Leu Asp Trp Leu Pro Val Arg Leu Val Gly
                            200
Val Val Tyr Ala Leu Ile Gly His Gly Glu Lys Ala Leu Pro Ala Trp
                        215
                                            220
Phe Val Ser Leu Ala Asp Arg His Thr Ser Gln Tyr Gln Val Leu Thr
                    230
                                        235
Arg Leu Ala Gln Phe Ser Leu Ala Arg Glu Pro His Thr Asp Lys Val
                                    250
                245
Ala Thr Pro Lys Ala Ala Val Ser Met Ala Lys Lys Thr Ser Phe Val
            260
                                265
Val Val Val Ile Val Ala Leu Leu Thr Ile Tyr Gly Thr Leu Val
                            280
<210> 9652
<211> 265
<212> PRT
<213> Enterobacter cloacae
<400> 9652
Leu Arg Ala Lys Arg Arg Lys Thr Gly Asn Met Ala Tyr Ser Lys Ile
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Arg Gln Pro Lys Leu Ser Asp Val Ile Glu Gln Leu Glu Phe Leu
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Ile Leu Glu Gly Thr Leu Arg Pro Gly Glu Lys Leu Pro Pro Glu Arg
Glu Leu Ala Lys Gln Phe Asp Val Ser Arg Pro Ser Leu Arg Glu Ala
Ile Gln Arg Leu Glu Ala Lys Gly Leu Leu Arg Arg Gln Gly Gly
Gly Thr Phe Val Gln Asn Ser Leu Trp Gln Ser Phe Ser Asp Pro Leu
                                    90
Val Glu Leu Leu Ser Asp His Pro Glu Ser Gln Phe Asp Leu Leu Glu
                                105
Thr Arg His Ala Leu Glu Gly Ile Ala Ala Tyr Tyr Ala Ala Leu Arg
                            120
Ser Thr Asp Glu Asp Arg Val Arg Ile Arg Glu Leu His Gln Ala Ile
                        135
                                            140
Glu Arg Ala Gln Gln Ser Gly Asp Leu Asp Ala Glu Ser Ser Ala Val
                    150
                                        155
Val Gln Tyr Gln Ile Ala Val Thr Glu Ala Ala His Asn Val Val Leu
               165
                                    170
Leu His Leu Leu Arg Cys Met Glu Pro Met Leu Ala Gln Asn Val Arg
            180
                                185
                                                    190
Gln Asn Phe Glu Leu Leu Tyr Ala Arg Arg Glu Met Leu Pro Leu Val
       195
                            200
                                                205
Ser Asn His Arg Thr Arg Val Phe Glu Ala Ile Met Ala Gly Glu Pro
                        215
                                           220
Glu Gln Ala Arg Glu Ala Ser His Arg His Leu Ala Phe Ile Glu Glu
                   230
                                       235
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Ile Leu Leu Asp Arg Ser Arg Glu Gln Ser Arg Arg Glu Arg Ser Leu

250

245 Arg Arg Ile Gln Gln Arg Lys Asp 260 265

<210> 9653 <211> 893 <212> PRT <213> Enterobacter cloacae <400> 9653 Ile Arg Asn Thr Pro Met Ser Glu Arg Leu Gln Asn Asp Val Asp Pro Ile Glu Thr Arg Asp Trp Leu Gln Ala Ile Glu Ser Val Ile Arg Glu Glu Gly Val Glu Arg Ala Gln Tyr Leu Ile Asp Gln Leu Leu Ser Glu 40 Ala Arg Lys Gly Gly Val Lys Val Ala Ser Gly Ala Gly Ala Ser Asn 55 Tyr Val Asn Thr Ile Ala Val Glu Asp Glu Pro Glu Tyr Pro Gly Asn 70 75 Leu Asp Leu Glu Arg Arg Ile Arg Ser Ala Ile Arg Trp Asn Ala Ile 85 90 Met Thr Val Leu Arg Ala Ser Lys Lys Asp Leu Glu Leu Gly Gly His 100 105 110 Met Ala Ser Phe Gln Ser Ser Ala Thr Ile Tyr Glu Val Cys Phe Asn 120 His Phe Phe Arg Ala Ala Asn Glu Lys Asp Gly Gly Asp Leu Val Tyr 135 140 Phe Gln Gly His Ile Ser Pro Gly Ile Tyr Ala Arg Ala Phe Leu Glu 150 155 Gly Arg Leu Thr Glu Glu Gln Met Asn Asn Phe Arg Gln Glu Val His 165 170 Gly Lys Gly Leu Ser Ser Tyr Pro His Pro Lys Leu Met Pro Glu Phe 180 185 Trp Gln Phe Pro Thr Val Ser Met Gly Leu Gly Pro Ile Gly Ala Ile 200 Tyr Gln Ala Lys Phe Leu Lys Tyr Leu Glu His Arg Gly Leu Lys Asp 215 Thr Ser Glu Gln Thr Val Tyr Ala Phe Leu Gly Asp Gly Glu Met Asp 230 235 Glu Pro Glu Ser Lys Gly Ala Ile Thr Ile Ala Thr Arg Glu Lys Leu 245 250 Asp Asn Leu Cys Phe Ile Ile Asn Cys Asn Leu Gln Arg Leu Asp Gly 265 Pro Val Thr Gly Asn Gly Lys Ile Ile Asn Glu Leu Glu Gly Ile Phe 280 Ala Gly Ala Gly Trp Asn Val Ile Lys Val Met Trp Gly Gly Arg Trp 295 300 Asp Glu Leu Leu Arg Lys Asp Thr Ser Gly Lys Leu Ile Gln Leu Met 310 315 Asn Glu Thr Val Asp Gly Asp Tyr Gln Thr Phe Lys Ser Lys Asp Gly 325 330 Ala Tyr Val Arg Glu His Phe Phe Gly Lys Tyr Pro Glu Thr Ala Ala 340 345 Leu Val Ala Asp Trp Thr Asp Glu Gln Ile Trp Ala Leu Asn Arg Gly 360 365 Gly His Asp Pro Lys Lys Val Tyr Ala Ala Leu Lys Lys Ala Arg Glu 375 380 Thr Lys Gly Lys Ala Thr Val Ile Leu Ala His Thr Ile Lys Gly Tyr 390 395 Gly Met Gly Asp Thr Ala Glu Gly Lys Asn Ile Ala His Gln Val Lys 405 410 Lys Met Asn Met Asp Gly Val Arg Tyr Ile Arg Asp Arg Phe Asn Val

Pro Val Thr Asp Glu Gln Val Glu Lys Leu Ser Tyr Ile Thr Phe Pro 435 440 Glu Gly Ser Glu Glu His Lys Tyr Leu His Glu Arg Arg Gln Ala Leu 455 460 Lys Gly Tyr Leu Pro Ala Arg Gln Pro Asn Phe Thr Glu Lys Leu Glu 470 475 Leu Pro Ala Leu Glu Asp Phe Ser Gln Leu Leu Glu Glu Gln Asn Lys 485 490 Glu Ile Ser Thr Thr Ile Ala Phe Val Arg Ala Leu Asn Val Met Leu 505 Lys Asn Lys Ser Ile Lys Asp Arg Leu Val Pro Ile Ile Ala Asp Glu 520 Ala Arg Thr Phe Gly Met Glu Gly Leu Phe Arg Gln Ile Gly Ile Tyr 535 Ser Pro Asn Gly Gln Gln Tyr Thr Pro Gln Asp Arg Glu Gln Val Ala 550 555 Tyr Tyr Lys Glu Asp Glu Lys Gly Gln Ile Leu Gln Glu Gly Ile Asn 570 565 Glu Leu Gly Ala Gly Ala Ser Trp Leu Ala Ala Ala Thr Ser Tyr Ser 580 585 Thr Asn Asn Leu Pro Met Ile Pro Phe Tyr Ile Tyr Tyr Ser Met Phe 595 600 Gly Phe Gln Arg Ile Gly Asp Leu Cys Trp Gln Ala Gly Asp Gln Gln 615 620 Ala Arg Gly Phe Leu Ile Gly Gly Thr Ser Gly Arg Thr Thr Leu Asn 630 635 Gly Glu Gly Leu Gln His Glu Asp Gly His Ser His Ile Gln Ser Leu 645 650 Thr Ile Pro Asn Cys Ile Ser Tyr Asp Pro Ser Tyr Ala Tyr Glu Val 660 665 670 Ala Val Ile Met His Asp Gly Leu Gln Arg Met Tyr Gly Glu Ala Gln 680 685 Glu Asn Ile Tyr Tyr Tyr Ile Thr Thr Leu Asn Glu Asn Tyr His Met 695 700 Pro Ala Met Pro Ala Gly Ala Glu Gly Ile Arg Lys Gly Ile Tyr 710 715 Lys Leu Glu Thr Ile Glu Gly Ser Lys Gly Lys Val Gln Leu Leu Gly 725 730 Ser Gly Ser Ile Leu Arg His Val Arg Glu Ala Ala Gln Ile Leu Ala 745 Lys Asp Tyr Gly Val Gly Ser Asp Val Tyr Ser Val Thr Ser Phe Thr 760 Glu Leu Ala Arg Asp Gly Gln Asp Cys Glu Arg Trp Asn Met Leu His 775 780 Pro Met Glu Thr Pro Arg Val Pro Tyr Ile Ala Gln Val Met Asn Asp 790 795 Ala Pro Ala Val Ala Ser Thr Asp Tyr Met Lys Leu Phe Ala Glu Gln 805 810 Val Arg Thr Tyr Val Pro Ala Asp Asp Tyr Arg Val Leu Gly Thr Asp 820 825 830 Gly Phe Gly Arg Ser Asp Ser Arg Glu Asn Leu Arg His His Phe Glu 840 835 845 Val Asp Ala Ser Tyr Val Val Val Ala Ala Leu Gly Glu Leu Ala Lys 855 860 Arg Gly Glu Ile Asp Lys Lys Val Val Ala Asp Ala Ile Thr Lys Phe 870 875 Asn Ile Asp Ala Asp Lys Val Asn Pro Arg Leu Ala 885

<212> PRT <213> Enterobacter cloacae

<400> 9654 Glu Val Met Met Ser Thr Glu Ile Lys Thr Gln Val Val Leu Gly 10 Ala Gly Pro Ala Gly Tyr Ser Ala Ala Phe Arg Ala Ala Asp Leu Gly 25 Leu Glu Thr Val Ile Val Glu Arg Tyr Ser Thr Leu Gly Gly Val Cys 40 Leu Asn Val Gly Cys Ile Pro Ser Lys Ala Leu Leu His Val Ala Lys Val Ile Glu Glu Ala Lys Ala Leu Ala Glu His Gly Ile Val Phe Gly 75 Glu Pro Lys Thr Asp Ile Asp Lys Ile Arg Thr Trp Lys Glu Lys Val 85 90 Ile Thr Gln Leu Thr Gly Gly Leu Ala Gly Met Ala Lys Gly Arg Lys 105 Val Lys Val Val Asn Gly Leu Gly Lys Phe Thr Gly Ala Asn Thr Leu 120 Glu Val Glu Gly Glu Asn Gly Lys Thr Val Ile Asn Phe Asp Asn Ala 135 140 Ile Ile Ala Ala Gly Ser Arg Pro Ile Glu Leu Pro Phe Ile Pro His 150 155 Glu Asp Pro Arg Val Trp Asp Ser Thr Asp Ala Leu Glu Leu Lys Thr 170 165 Val Pro Lys Arg Leu Leu Val Met Gly Gly Gly Ile Ile Gly Leu Glu 180 185 Met Gly Thr Val Tyr His Ala Leu Gly Ser Glu Ile Asp Val Val Glu 200 Met Phe Asp Gln Val Ile Pro Ala Ala Asp Lys Asp Ile Val Lys Val 215 220 Phe Thr Lys Arg Ile Ser Lys Lys Phe Asn Leu Met Leu Glu Thr Lys 230 235 Val Thr Ala Val Glu Ala Lys Glu Asp Gly Ile Tyr Val Ser Met Glu 245 250 Gly Lys Lys Ala Pro Ser Glu Pro Gln Arg Tyr Asp Ala Val Leu Val 265 Ala Ile Gly Arg Val Pro Asn Gly Lys Asn Leu Asp Ala Gly Lys Ala 280 Gly Val Glu Val Asp Asp Arg Gly Phe Ile Arg Val Asp Lys Gln Leu 295 Arg Thr Asn Val Pro His Ile Phe Ala Ile Gly Asp Ile Val Gly Gln 310 315 Pro Met Leu Ala His Lys Gly Val His Glu Gly His Val Ala Ala Glu 325 330 Val Ile Ala Gly Met Lys His Tyr Phe Asp Pro Lys Val Ile Pro Ser 345 Ile Ala Tyr Thr Glu Pro Glu Val Ala Trp Val Gly Leu Thr Glu Lys 360 Glu Ala Lys Glu Lys Gly Ile Ser Tyr Glu Thr Ala Thr Phe Pro Trp 375 380 Ala Ala Ser Gly Arg Ala Ile Ala Ser Asp Cys Ala Asp Gly Met Thr 390 395 Lys Leu Ile Phe Asp Lys Glu Thr His Arg Val Ile Gly Gly Ala Ile 405 410 Val Gly Thr Asn Gly Gly Glu Leu Leu Gly Glu Ile Gly Leu Ala Ile 425 Glu Met Gly Cys Asp Ala Glu Asp Ile Ala Leu Thr Ile His Ala His 440 Pro Thr Leu His Glu Ser Val Gly Leu Ala Ala Glu Val Phe Glu Gly

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455
Ser Ile Thr Asp Leu Pro Asn Ala Lys Ala Lys Lys
                    470
<210> 9655
<211> 149
<212> PRT
<213> Enterobacter cloacae
<400> 9655
Asn His Ala Ala Gly Gly His Phe Asn Ile Arg Ala Glu Gly Thr Gln
Pro Ala Phe Arg Val Ala Phe Arg Val Gly Val His Ala Asp Val Ala
            20
                                25
Phe Ile Gln Val Ser Asn His His Phe Arg Gln Arg Ala Gly Val Phe
        35
                            40
Gly Phe Val Asp Lys Leu Trp Val Asn Arg Leu Phe Thr His Gln Asn
                        55
Gly Asp Ala Arg Thr Leu Arg Leu Ile Ile Leu Ala Arg Asp Ile Glu
                    70
Asp Val Arg Ala Asp Asn Arg Ala Gly Leu Cys Gln Asp Leu Gly Gln
                                    90
                85
Thr Val Gly Val Val Glu Phe Ile Asp Ile Gly Asp Val Thr Ile Ala
            100
                                105
                                                     110
Leu Phe Cys Cys Phe Gly Val Ála Asp Ile Val Asn Thr Lys Thr Gln
        115
                            120
Ala Phe Gly Gln Ile Val Lys Ala Met Gln Phe Lys Leu Phe Gln Leu
    130
                        135
                                            140
Val His Leu Leu
145
<210> 9656
<211> 588
<212> PRT
<213> Enterobacter cloacae
<400> 9656
Leu Phe Ala His Ile Ala Ile Arq Leu Ala Asn Lys Ile Val Leu Lys
Asn Val Phe Ile Ala Phe Thr Thr Ala Ser Arg Lys Ile Asn Val Ser
Ile Leu Asp Ala Arg Pro Thr Ile Phe Ile Ile Ala Ala Val Leu Asp
Leu Pro Val Arg Gly Gly Phe Met Leu Lys Arg Ser Pro Ala Gly Asn
                        55
Lys Glu Met His Met Gln Arg Arg Asp Phe Leu Lys Phe Ser Ala Ala
                    70
                                        75
Leu Gly Val Ala Ser Ala Ile Pro Leu Trp Ser Arg Ala Val Phe Ala
                85
                                    90
Ala Asp Arg Pro Ala Leu Pro Ile Pro Glu Leu Leu Ala Pro Asp Ala
                                105
                                                     110
Arg Ser Arg Ile Gln Leu Val Val Gln Ala Gly Lys Thr Thr Phe Gly
                            120
                                                125
Gln His Ala Ala Thr Trp Gly Tyr Asn Gly Asn Leu Leu Gly Pro
                        135
                                            140
Ala Leu Gln Leu Arg Lys Gly Lys Ala Val Thr Val Asp Ile His Asn
                    150
                                        155
Thr Leu Ala Glu Glu Thr Thr Leu His Trp His Gly Leu Glu Val Pro
                165
                                    170
Gly Glu Val Asp Gly Gly Pro Gln Gly Val Ile Arg Pro Gly Gly Lys
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Arg Ser Val Thr Phe Thr Pro Glu Gln Arg Ala Ala Thr Cys Trp Phe
                            200
His Pro His Gln His Gly Lys Thr Gly His Gln Val Ala Met Gly Leu
                        215
                                           220
Ala Gly Leu Val Leu Ile Glu Asp Asp Glu Ser Arg Leu Leu Arg Leu
                   230
                                       235
Pro Lys Gln Trp Gly Ile Asp Asp Val Pro Val Ile Val Gln Asp Lys
               245
                                    250
Lys Phe Ser Ala Asp Gly Gln Ile Asp Tyr Gln Leu Asp Val Met Ser
                                265
Ala Ala Val Gly Trp Phe Gly Asp Thr Leu Leu Thr Asn Gly Ala Ile
                            280
Tyr Pro Gln His Ala Ala Pro Lys Gly Trp Leu Arg Leu Arg Leu Leu
                        295
                                            300
Asn Gly Cys Asn Ala Arg Ser Leu Asn Phe Ala Thr Ser Asp Lys Arg
                                        315
                    310
Pro Leu Tyr Val Val Ala Ser Asp Gly Gly Leu Leu Pro Glu Pro Val
               325
                                    330
Lys Val Ser Glu Leu Pro Met Leu Met Gly Glu Arg Phe Glu Val Leu
           340
                                345
Val Asp Ile Ser Asp Gly Lys Ala Phe Asp Leu Val Thr Leu Pro Val
                            360
Ser Gln Met Gly Met Ala Val Ala Pro Phe Asp Lys Pro His Pro Val
    370
                                            380
                        375
Leu Arg Ile Gln Pro Leu Gln Ile Thr Ala Ser Gly Thr Leu Pro Glu
                   390
                                        395
Thr Leu Thr Thr Leu Pro Ala Leu Pro Ser Leu Asp Gly Leu Thr Gln
                405
                                    410
Arg Lys Leu Gln Leu Ser Met Asp Pro Met Leu Asp Met Met Gly Met
           420
                                425
Gln Ala Leu Met Lys Lys Tyr Gly Asn Gln Ala Met Ala Gly Met His
                                     445
                            440
His Gly Gln Met Met Gly His Met Asn Met Asp His Gly Asn Met Gly
                        455
Gly Met Asn His Gly Gly His Gly Phe Asp Phe His Asn Ala Asn Arg
                    470
                                        475
Ile Asn Gly Lys Ala Phe Asp Met Asn Thr Pro Met Phe Ala Ala Thr
                485
                                    490
Lys Gly Gln Phe Glu Arg Trp Met Ile Ser Gly Glu Gly Asp Met Met
                                505
Leu His Pro Phe His Ile His Gly Thr Gln Phe Arg Ile Leu Ser Glu
                            520
Asn Gly Lys Ala Pro Glu Pro His Arg Ala Gly Trp Lys Asp Thr Val
                        535
                                            540
Arg Val Glu Gly Val Ser Glu Val Leu Val Lys Phe Asp His Glu
                   550
                                    . 555
Ala Pro Lys Glu Phe Ala Tyr Met Ala His Cys His Leu Leu Glu His
               565
                                    570
Glu Asp Thr Gly Met Met Leu Gly Phe Thr Val
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<210> 9657 <211> 278

<212> PRT

<213> Enterobacter cloacae

<400> 9657

Gln Ser Lys Pro Thr Gly Arg Ala Val Cys Leu Ser Gly Ala Arg Gln 1 5 10 15 Thr Arg Arg Gln Gly Met Thr His Leu Tyr Trp Val Ala Leu Lys Ser 20 25 30

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Ile Trp Ala Lys Glu Ile Asn Arg Phe Met Arg Ile Trp Val Gln Thr
                            40
Leu Val Pro Pro Val Ile Thr Met Thr Leu Tyr Phe Ile Ile Phe Gly
                        55
Asn Leu Ile Gly Ser Arg Ile Gly Glu Met His Gly Phe Thr Tyr Met
                    70
                                        75
Gln Phe Ile Val Pro Gly Leu Ile Met Met Ala Val Ile Thr Asn Ala
Tyr Ala Asn Val Ala Ser Ser Phe Phe Ser Ala Lys Phe Gln Arg Asn
            100
                                105
Ile Glu Glu Leu Leu Val Ala Pro Val Pro Thr His Val Ile Ile Ala
        115
                            120
                                                125
Gly Tyr Val Gly Gly Val Ala Arg Gly Leu Cys Val Gly Ile Leu
    130
                        135
                                            140
Val Thr Ala Ile Ser Leu Phe Phe Val Pro Phe Gln Val His Ser Trp
                    150
                                        155
Leu Phe Val Ala Leu Thr Leu Leu Thr Ala Ile Leu Phe Ser Leu
                                    170
                165
Ala Gly Leu Leu Asn Ala Val Phe Ala Lys Thr Phe Asp Asp Ile Ser
            180
                                185
                                                    190
Leu Ile Pro Thr Phe Val Leu Thr Pro Leu Thr Tyr Leu Gly Gly Val
       195
                            200
Phe Tyr Ser Leu Thr Leu Leu Pro Pro Phe Trp Gln Ala Leu Ser His
                        215
                                            220
Leu Asn Pro Ile Val Tyr Met Ile Ser Gly Phe Arg Phe Gly Phe Leu
                    230
                                        235
Gly Ile Thr Asp Val Pro Leu Phe Thr Thr Val Val Leu Val Val
                245
                                    250
Phe Ile Ile Ala Phe Tyr Leu Leu Cys Trp Tyr Leu Ile Gln Arg Gly
            260
                                265
Arg Gly Leu Arg Ser
       275
<210> 9658
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 9658
Asp Asp Met Lys Gln Ser Ile Val Lys Trp Leu Phe Glu Leu Asn Ala
                                    10
Lys Gln Arg Glu Val Leu Ala Arg Arg Phe Gly Leu Leu Gly Tyr Glu
                                25
Ala Ala Thr Leu Glu Asp Val Gly Arg Glu Ile Gly Leu Thr Arg Glu
                            40
Arg Val Arg Gln Ile Gln Val Glu Gly Leu Arg Arg Leu Arg Glu Ile
                        5.5
Leu Gln Gly Gln Gly Leu Asn Ile Glu Ala Leu Phe Arg Glu
<210> 9659
<211> 201
<212> PRT
<213> Enterobacter cloacae
<400> 9659
Met Arg Leu Ile Val Gly Met Thr Gly Ala Thr Gly Ala Pro Leu Gly
                                    10
Val Ala Leu Leu Gln Ala Leu Arg Glu Met Pro Glu Val Glu Thr His
                                25
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Leu Val Met Ser Lys Trp Ala Lys Thr Thr Ile Glu Leu Glu Thr Pro

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40
Phe Thr Ala His Asp Val Ala Ala Leu Ala Asp Val His Ser Pro
                       55
                                            60
Ala Asp Gln Ala Ala Thr Ile Ser Ser Gly Ser Phe Arg Thr Asp Gly
                   70
                                        75
Met Ile Val Ile Pro Cys Ser Met Lys Thr Leu Ala Gly Ile Arg Ala
               85
                                    90
Gly Tyr Ala Glu Gly Leu Val Gly Arg Ala Ala Asp Val Val Leu Lys
            100
                                105
Glu Gly Arg Lys Leu Val Leu Val Pro Arg Glu Thr Pro Leu Ser Thr
                            120
Ile His Leu Glu Asn Met Leu Ala Leu Ser Arg Met Gly Val Ala Met
                        135
Val Pro Pro Met Pro Ala Tyr Tyr Asn His Pro Gln Thr Ala Asp Asp
                    150
                                        155
Ile Thr Gln His Ile Val Thr Arg Val Leu Asp Gln Phe Gly Leu Glu
               165
                                    170
His Lys Lys Ala Arg Arg Trp Glu Gly Leu Gln Ala Ala Lys His Phe
                                185
Ser Gln Glu Asn Lys Asp Gly Ile
       195
<210> 9660
<211> 119
<212> PRT
<213> Enterobacter cloacae
<400> 9660
Gly Gly Met Lys Met Ala Gly Lys Arg Ile Ala Arg Glu Lys Glu Thr
Ile Ala Lys Met Ile Ala Leu Tyr Glu Lys Asn Cys Pro Gln Ala Val
Lys Asp Glu Gly His Tyr Gln Ala Leu Asn Ala Tyr Ala Asp Lys Arg
Leu Asp Lys Cys Ile Phe Gly Glu Glu Lys Pro Ala Cys Lys Gln Cys
                        55
Pro Val His Cys Tyr Gln Pro Ala Arg Arg Glu Glu Met Lys Gln Val
                    70
Met Arg Trp Ala Gly Pro Arg Met Leu Trp Arg His Pro Ile Leu Thr
                                    90
Leu Arg His Leu Ile Asp Asp Arg Pro Val Pro Glu Leu Pro Glu
            100
                                105
Lys Tyr Arg Pro Lys Lys
       115
<210> 9661
<211> 208
<212> PRT
<213> Enterobacter cloacae
<400> 9661
Phe Ala Leu Arg Arg Asp Asp Val Asn Ala Val Glu Met Thr Arg Arg
                                    10
His Arg Gly Gly Asp Ser Thr Ser Leu Val Lys Ser Tyr Leu Asn Gln
                                25
Gln Ile Lys Asn Trp His Glu Asn Cys Leu Thr Ala Ala Asn Ser Ile
                           40
Asn Arg Ile Pro Phe Met Thr Ile Trp Glu Ile Ser Glu Lys Ala Asp
                       55
Tyr Ile Ala Gln Arg His Gln Gln Leu Gln Asp Gln Trp His Leu Tyr
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Cys Asn Ser Leu Ile Gln Gly Ile Thr Leu Ser Lys Ala Arg Leu His 8.5 90 His Ala Met Ser Cys Ala Ala Gln Gly Asp Met Arg Phe Val Leu Phe 105 Gly His Phe Thr Ile Phe Val Thr Leu Ala Glu Ser Phe Asn Ser His 120 Thr Ile Glu Tyr Tyr Val Glu Thr Lys Glu Gly Glu Lys Gln Cys Ile 135 Ala Lys Ala Gln Leu Met Ala Asp Gly Met Val Asp Gly His Val Ser 150 155 Asn Arg Asp Arg Gln Gln Val Leu Glu His Tyr Leu Glu Lys Ile Ala 170 165 Pro Val Tyr Asn Gly Leu Tyr Ala Ala Val Glu His Asp Gln Ser Ile 185 Asn Leu Lys Gln Leu Ile Asp Gly Lys Ser Ser Ala Asn Val Ala 200 <210> 9662 <211> 609 <212> PRT

<213> Enterobacter cloacae

<400> 9662 Arg Gly Glu Met Asn Ala Ile Val Met Met Thr Ser Gly Val Ala 10 Trp Phe Ala Ala Ala Ala Val Leu Ala Leu Leu Leu Ala Phe His Lys Thr Leu Ser Gly Val Ile Ala Gly Ile Gly Gly Ala Val Gly Ser Leu Met Thr Leu Ala Ala Gly Gly Val Val Leu Ile Asp Gly Gln Ser Val 55 Asp Thr Leu Ile Pro Leu Ile His His Ala Val Glu Leu Thr Pro Leu 70 Asn Ala Ile Trp Leu Ile Thr Phe Gly Leu Cys Gly Leu Phe Ile Ser 90 Leu Phe Asn Ile Asp Trp His Arg His Gln His Thr Lys Ala Asn Gly ' 105 Leu Leu Val Asn Leu Leu Met Ala Ala Ala Val Cys Thr Val Val Ala 120 Ser Asn Leu Gly Ala Leu Val Val Met Ala Glu Ile Met Ala Leu Cys 135 140 Gly Val Phe Leu Thr Gly Cys Ser Ala Ser Gly Lys Leu Trp Phe Ala 150 155 Leu Gly Arg Leu Gly Thr Leu Leu Leu Ala Leu Ala Cys Trp Leu Val 170 165 Trp Gln Arg Phe Gly Thr Leu Asp Phe Ala Ala Leu Asn Gly Gln Pro 185 Leu Gly Asn Asp Val Trp Leu Leu Gly Val Val Gly Phe Gly Leu Leu 200 205 Ala Gly Ile Ile Pro Leu His Gly Trp Val Pro Gln Ala His Ala Asn 215 220 Ala Ser Ala Pro Ala Ala Ala Leu Phe Ser Thr Val Val Met Lys Val 230 235 Gly Leu Phe Gly Ile Leu Thr Ile Thr Leu Thr Gly Asp Gln Pro Pro 250 Leu Trp Trp Gly Val Ala Leu Leu Ile Ala Gly Met Ile Thr Ala Phe 265 Val Gly Gly Leu Tyr Ala Leu Met Glu His Asn Ile Gln Arg Leu Leu 280 Ala Tyr His Thr Leu Glu Asn Ile Gly Ile Ile Leu Leu Gly Met Gly 295

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Ala Gly Val Thr Gly Leu Ala Leu Asn Gln Pro Ala Leu Ile Ala Ala
                    310
                                       315
Gly Phe Ile Gly Gly Leu Tyr His Leu Ile Asn His Ser Leu Phe Lys
               325
                                    330
Ser Thr Leu Phe Leu Gly Ala Gly Ser Val Trp Phe Arg Thr Gly His
                                345
Arg Asp Ile Glu Lys Leu Gly Gly Ile Gly Lys Lys Met Pro Val Ile
                            360
Ser Leu Ala Met Leu Val Gly Leu Met Ala Met Ala Leu Pro Pro
                        375
                                            380
Leu Asn Gly Phe Ala Gly Glu Trp Val Ile Tyr Gln Ser Phe Phe Ala
                    390
                                        395
Leu Gly Gln Ser Glu Ala Phe Ile Gly Arg Leu Leu Gly Pro Leu Leu
                                    410
                405
Ala Val Gly Leu Ala Ile Thr Gly Ala Leu Ala Val Met Cys Met Ala
            420
                                425
                                                    430
Lys Val Tyr Gly Val Thr Phe Leu Gly Ala Pro Arg Thr Arg Glu Ala
        435
                            440
Glu Asn Ala Cys Cys Ala Pro Val Leu Met Thr Thr Ser Val Val Ala
                        455
                                            460
Leu Ala Leu Cys Cys Ile Ala Gly Gly Val Ala Ala Pro Trp Leu Leu
                    470
                                        475
Pro Leu Leu Gly His Ala Ile Pro Leu Pro Leu Val Thr Ala His Thr
                485
                                    490
Val Val Ser Gln Pro Met Met Ala Leu Leu Ile Ala Ala Pro Leu
            500
                                505
Leu Pro Phe Val Leu Met Leu Phe Phe Arg Arg Asp Arg Leu Ala Ser
                            520
                                                525
Arg Ser Arg Gly Ala Ala Trp Ala Cys Gly Tyr Glu His Glu Gln Ser
                        535
                                            540
Met Val Ile Thr Ala His Gly Phe Ala Met Pro Val Lys Glu Asn Phe
                    550
                                        555
Ala Ala Val Leu Lys Leu Arg His Trp Leu Asn Pro Val Gly Trp Val
                                    570
Pro Gly Trp Gln Gly Ala Ala Val Pro Val Leu Phe Arg Arg Leu Ala
                                585
Leu Ile Glu Leu Ala Val Leu Val Val Ile Val Ile Ser Arg Gly Ala
        595
                            600
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<210> 9663
<211> 269
<212> PRT
<213> Enterobacter cloacae
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<400> 9663

Pro His Arg Phe Asn Pro Pro Tyr Glu Arg Gly Gln Leu Met Glu Asn 10 Leu Leu Gly Pro Arg Asp Ala Asn Gly Ile Pro Val Pro Leu Thr Val 25 Glu Glu Ser Ile Ala Ser Met Lys Ala Ser Leu Leu Lys Lys Ile Lys 40 Arg Ser Ala Tyr Val Tyr Arg Val Asp Cys Gly Gly Cys Asn Gly Cys 55 Glu Ile Glu Ile Phe Ala Thr Leu Ser Pro Leu Phe Asp Ala Glu Arg 70 75 Phe Gly Ile Lys Val Val Pro Ser Pro Arg His Ala Asp Ile Leu Leu 85 90 Phe Thr Gly Ala Val Thr Arg Ala Met Arg Ser Pro Ala Leu Arg Ala 105

```
Trp Gln Ser Ala Pro Asp Pro Lys Ile Cys Ile Ser Tyr Gly Ala Cys
                            120
                                                 125
Gly Asn Ser Gly Gly Ile Phe His Asp Leu Tyr Cys Val Trp Gly Gly
                        135
                                             140
Thr Asp Lys Ile Val Pro Val Asp Val Tyr Ile Pro Gly Cys Pro Pro
                    150
                                        155
Thr Pro Ala Ala Thr Leu Tyr Gly Phe Ala Met Ala Leu Gly Leu Leu
                                    170
Glu Gln Lys Ile His Ala Arg Glu Pro Gly Glu Leu Asp Asn Gln Pro
            180
                                185
Ala Thr Ile Leu His Pro Asp Met Val Gln Pro Leu Arg Val Lys Ile
                            200
                                                 205
Asp Arg Thr Ala Arg Arg Leu Ala Gly Tyr Arg Tyr Gly Arg Gln Ile
                        215
                                             220
Ala Asp Asp Tyr Leu Arg Leu Leu Ser Gln Gly Asp His Gln Val Ala
                    230
                                         235
Arg Trp Leu Glu Ala Glu Lys Asp Pro Arg Leu Asn Glu Ile Val Ala
                245
                                    250
Asn Leu Asn Asn Ile Val Asp Glu Ala Arg Ile Arg
            260
                                265
<210> 9664
<211> 155
<212> PRT
<213> Enterobacter cloacae
<400> 9664
Gly Asp Tyr Val Thr Asp Val Leu Leu Cys Val Gly Asn Ser Met Met
                                    10
Gly Asp Asp Gly Ala Gly Pro Leu Leu Ala Glu Leu Cys Ala Ala Asn
Ser Pro Gly Asn Trp Val Val Ile Asp Gly Gly Ser Ala Pro Glu Asn
Asp Val Val Ala Ile Arg Glu Leu His Pro Asp Arg Leu Leu Ile Val
Asp Ala Thr Asp Met Gly Leu Asn Pro Gly Glu Ile Arg Leu Ile Asp
                                         75
Pro Asp Asp Ile Ala Glu Met Phe Met Met Thr Thr His Asn Met Pro
Leu Asn Tyr Leu Val Asp Gln Ile Lys Gly Asp Val Gly Glu Val Leu
            100
                                105 .
Phe Leu Gly Ile Gln Pro Asp Ile Val Gly Phe Tyr Tyr Pro Met Thr
                            120
Pro Pro Val Lys Glu Ala Val Asp Val Val Tyr Ser Arg Leu Ala Gly
                        135
Trp Val Gly Asp Gly Gly Phe Ser Pro Leu
                    150
                                         155
<210> 9665
<211> 371
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(371)
<400> 9665
Phe Leu Val Glu Lys Gly Thr Asp Leu Arg Trp Gly Gly Ala Asn Arg
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Phe Leu Glu Glu Leu Gly Met Leu Tyr His Thr Gly Phe Leu Pro Asn

```
20
                                25
Ser Leu Asn Gly Cys His Met Phe Lys Arg Arg Tyr Ala Ala Leu Leu
                            40
                                                45
Pro Ala Leu Ile Leu Leu Ser Ala Cys Ser Ser Lys Pro Lys Thr Glu
                        55
                                             60
Ala Val Gln Pro Thr Ala Gly Ala Pro Ser Gly Gly Phe Leu Leu Glu
                    70
                                         75
Pro Gln His Asn Met Met Gln Met Gly Gly Asp Phe Ala Asn Asn Pro
                                    90
Ala Ala Glu Gln Phe Ile Asp Lys Met Val Ser Lys His Gly Phe Asp
                                105
Arg Gln Gln Leu His Ala Ile Leu Ser Gln Ala Lys Arg Leu Asp Tyr
                            120
Val Leu Arg Leu Met Asp Arg Gln Ala Pro Thr Ala Gln Val Pro Thr
                        135
                                             140
Gly Pro Asn Gly Ala Trp Leu Arg Tyr Arg Lys Gln Phe Ile Thr Pro
                    150
                                         155
Asp Asn Val Gln Asn Gly Val Val Phe Trp Asn Gln Tyr Glu Asp Ala
                165
                                    170
Leu Asn Arg Ala Trp Gln Val Tyr Gly Val Pro Pro Glu Ile Ile Val
            180
                                185
Gly Ile Ile Gly Val Glu Thr Arg Trp Gly Arg Ile Met Gly Lys Thr
                            200
Arg Ile Leu Asp Ala Leu Ala Thr Leu Ser Phe Asn Tyr Pro Arg Arg
                                             220
    210
                        215
Ala Glu Tyr Phe Ser Ser Glu Leu Glu Thr Phe Leu Leu Met Ala Arg
                    230
                                         235
Asp Glu Gln Asp Asp Pro Leu Asp Leu Lys Gly Ser Phe Ala Gly Ala
                                     250
                245
Met Gly Tyr Gly Gln Phe Met Pro Ser Ser Tyr Lys Gln Tyr Ala Val
                                                     270
            260
                                265
Asp Phe Asn Gly Asp Gly His Ile Asn Leu Trp Asp Pro Glu Asp Ala
                            280
Ile Gly Ser Val Ala Asn Tyr Phe Lys Ala His Gly Trp Thr Pro Gly
                        295
                                             300
Gly Gln Val Ala Val Gln Ala Asn Gly Glu Ala Phe Gly Leu Glu Asn
                    310
                                         315
Gly Phe Lys Thr Lys Tyr Ser Val Ala Gln Leu Ala Ala Ala Gly Leu
                                     330
Thr Pro Ser Gln Pro Leu Gly Asn Val Asp Gln Val Ser Leu Leu Arg
Leu Asp Gly Leu His His Gly Ala Arg Arg Ser Arg Ala Lys Arg Ile
Lys Glu Xaa
    370
<210> 9666
<211> 507
<212> PRT
<213> Enterobacter cloacae
<400> 9666
Pro Val Phe Ser Thr Ser Leu Val Trp Ser Ile Lys Lys Pro Asp Ala
                                    10
Gly Lys Val Cys Arg Gln Arg Asn Ile Phe His Arg Arg Ile Lys Met
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Ala Phe Asp Asp Leu Arg Ser Phe Leu Gln Ala Leu Asp Glu Gln Gly 35 40 45

Gln Leu Leu Lys Ile Glu Glu Glu Val Asn Ala Glu Pro Asp Leu Ala 50 55 60

Ala Ala Ala Asn Ala Thr Gly Arg Ile Gly Asp Gly Ala Pro Ala Leu

```
70
                                        75
Trp Phe Asp Asn Ile Arg Gly Phe Thr Asp Ala Arg Val Val Met Asn
               85
                                    90
Thr Ile Gly Ser Trp Gln Asn His Ala Ile Ser Met Gly Leu Pro Ala
                                105
Asn Thr Pro Val Lys Lys Gln Ile Asp Glu Phe Ile Arg Arg Trp Asp
                            120
Lys Phe Pro Val Ser Pro Glu Arg Arg Ala Asn Pro Ala Trp Ala Gln
                       135
                                            140
Asn Thr Val Asp Gly Glu Asp Ile Asn Leu Phe Asp Ile Leu Pro Leu
                    150
                                        155
Phe Arg Leu Asn Asp Gly Asp Gly Phe Tyr Leu Asp Lys Ala Cys
                165
                                    170
Val Val Ser Arg Asp Pro Leu Asp Pro Asp His Phe Gly Lys Gln Asn
            180
                                185
Val Gly Ile Tyr Arg Met Glu Val Lys Gly Lys Arg Lys Leu Gly Leu
                            200
                                                205
Gln Pro Val Pro Met His Asp Ile Ala Leu His Leu His Lys Ala Glu
                        215
                                            220
Glu Arg Gly Glu Asp Leu Pro Ile Ala Ile Thr Leu Gly Asn Asp Pro
                    230
                                        235
Ile Ile Thr Leu Met Gly Ala Thr Pro Leu Lys Tyr Asp Gln Ser Glu
                245
                                    250
Tyr Glu Met Ala Gly Ala Leu Arg Glu Ser Pro Tyr Pro Ile Ala Thr
            260
                                265
Ala Pro Leu Thr Gly Phe Asp Val Pro Trp Gly Ser Glu Val Ile Leu
                            280
Glu Gly Val Ile Glu Gly Arg Lys Arg Glu Ile Glu Gly Pro Phe Gly
    290
                        295
                                            300
Glu Phe Thr Gly His Tyr Ser Gly Gly Arg Asn Met Thr Val Val Arg
                    310
                                        315
Ile Asp Lys Val Ser Tyr Arg Thr Lys Pro Ile Phe Glu Ser Leu Tyr
                                    330
Leu Gly Met Pro Trp Thr Glu Ile Asp Tyr Leu Met Gly Pro Ala Thr
                                345
Cys Val Pro Leu Tyr Gln Gln Leu Lys Ser Glu Phe Pro Glu Val Gln
Ala Val Asn Ala Met Tyr Thr His Gly Leu Leu Ala Ile Ile Ser Thr
                        375
Lys Lys Arg Tyr Gly Gly Phe Ala Arg Ala Val Gly Leu Arg Ala Met
                    390
                                        395
Thr Thr Pro His Gly Leu Gly Tyr Val Lys Met Val Ile Met Val Asp
                405
                                    410
Glu Asp Val Asp Pro Phe Asn Leu Pro Gln Val Met Trp Ala Leu Ser
                                425
            420
                                                    430
Ser Lys Val Asn Pro Ala Gly Asp Leu Val Gln Leu Pro Asn Met Ser
                            440
                                                445
Val Leu Glu Leu Asp Pro Gly Ser Ser Pro Ala Gly Ile Thr Asp Lys
                        455
                                            460
Leu Ile Ile Asp Ala Thr Thr Pro Val Ala Pro Asp Asn Arg Gly His
                    470
                                        475
Tyr Ser Gln Pro Val Gln Asp Leu Pro Glu Thr Lys Ala Trp Ala Glu
                485
                                    490
Lys Leu Thr Ala Met Leu Ala Ala Arg Gln
            500
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<sup>&</sup>lt;210> 9667

<sup>&</sup>lt;211> 165

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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5238
<400> 9667
Arg Thr Ser Leu Met Thr Lys Lys Ala Thr Val Leu Leu Phe Leu Val
Phe Phe Leu Ala Gly Ala Leu Ala Ala Trp Leu Tyr Arg Leu His Gln
Gln Asn Ser Glu Asn Thr Glu Ala Cys Ser Ala Ser Ile Val Val Tyr
                            40
His Glu Asp Ile Arg Ala Asn Leu Thr Met Asp Phe Met Tyr Thr Met
                        55
Lys Lys Gln Thr Gly Val Ile Ala Leu Ser Gly Ala Tyr Tyr Lys Asn
                    70
                                        75
Asp Lys Leu Ala Gly Val Ile Arg Asp Val Ser Tyr Val Trp Thr
                                    90
                85
Glu Asn Lys Asp Ser Phe His Phe Thr Ser Val Asn Ile His Asp Ile
            100
                                105
Asn Gly Gln Gln Thr Ala Pro Asn Glu Ile Met Asn Glu Ile Leu Pro
                            120
Asp Phe Phe Leu Tyr Pro Lys Lys Asn Leu Asn Tyr Ser Ile Thr Gln
                        135
                                            140
Gln Gly Pro Arg Gly Phe Met Phe Ser Val Gly Lys Arg Pro Ile Phe
                    150
                                        155
Tyr Cys Ser Arg
<210> 9668
<211> 210
<212> PRT
<213> Enterobacter cloacae
<400> 9668
Pro Ser Pro Glu Asp Asp Pro Val Asn Arg Phe Val Ile Ala Asp Ser
Thr Val Cys Ile Gly Cys Arg Thr Cys Glu Ala Ala Cys Ser Glu Thr
                                25
His Arg Leu His Gly Leu Gln Ser Met Pro Arg Leu Arg Val Met Arg
Asn Glu Lys Glu Ser Ala Pro Gln Leu Cys His His Cys Glu Asp Ala
Pro Cys Ala Gly Val Cys Pro Val Asn Ala Ile Thr Arg Val Asp Gly
                                        75
Ala Val Gln Leu Asn Glu Ser Leu Cys Val Ser Cys Lys Leu Cys Gly
                                    90
                85
Ile Ala Cys Pro Phe Gly Ala Ile Glu Phe Ser Gly Ser Arg Pro Leu
            100
                                105
                                                    110
His Ile Pro Ala Asn Ala Asn Thr Pro Lys Ala Pro Pro Ala Pro Pro
        115
                            120
                                                125
Ala Pro Ala Arg Val Ser Thr Leu Leu Asp Trp Val Pro Gly Ile Arg
                        135
                                            140
Ala Val Ala Val Lys Cys Asp Leu Cys Ser Phe Asp Glu Gln Gly Pro
                    150
                                        155
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Ala Cys Val Arg Thr Cys Pro Thr Arg Ala Leu Val Leu Val Asn Ile 165

170 Arg Asp Ile Ala Arg Thr Ser Lys Arg Lys Arg Glu Leu Thr Ile Asn 185

Thr Asp Val Gly Asp Leu Ser Leu Leu Arg Ala Leu Asn Glu Gly Ala 200

Lys

210

<210> 9669 <211> 316

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<212> PRT
<213> Enterobacter cloacae
<400> 9669
Leu Ser Phe His Glu Glu Pro Asp Met Ser Leu Leu Leu Ala Ile Leu
Gln Ala Leu Val Leu Phe Ala Ala Ala Pro Leu Leu Ser Gly Ile Thr
                                25
Arg Val Ala Arg Ala Arg Leu His Asn Arg Arg Gly Pro Gly Val Leu
Gln Glu Tyr Arg Asp Leu Phe Lys Leu Leu Ser Arg Gln Ser Val Ala
                        55
Pro Asp Ala Ala Gly Trp Val Phe Arg Leu Thr Pro Phe Val Met Val
                    70
                                        75
Gly Val Met Leu Thr Ile Ala Thr Ala Leu Pro Val Val Thr Val Ala
                                    90
Ser Pro Leu Pro Val Leu Gly Asp Leu Ile Thr Leu Ile Tyr Leu Phe
           100
                                105
                                                    110
Ala Ile Ala Arg Phe Phe Phe Ala Ile Ala Gly Leu Asp Thr Gly Ser
                            120
Pro Phe Thr Gly Ile Gly Ala Ser Arg Glu Ala Met Leu Gly Val Leu
                        135
                                            140
Val Glu Pro Ile Leu Leu Gly Leu Trp Val Ala Ala Gln Val Ala
                    150
                                        155
Gly Ser Thr His Ile Ser Phe Ile Thr Asp Thr Val Tyr His Trp Pro
                                    170
Val Ser Arg Ser Leu Pro Leu Val Leu Ala Leu Cys Ala Cys Ala Phe
           180
                                185
                                                 190
Ala Thr Phe Ile Glu Met Gly Lys Leu Pro Phe Asp Leu Ala Glu Ala
                            200
Glu Gln Glu Leu Gln Glu Gly Pro Leu Thr Glu Tyr Ser Gly Tyr Gly
                        215
                                            220
Phe Ala Val Leu Lys Trp Gly Ile Ser Leu Lys Gln Leu Val Val Leu
                    230
                                        235
Gln Met Phe Val Gly Val Phe Phe Pro Trp Gly Gln Met Thr His Phe
                                    250
                245
Ser Ala Gly Gly Leu Leu Ala Val Val Val Ala Val Leu Lys Leu
Leu Ile Gly Val Leu Val Ile Ala Leu Phe Glu Asn Ser Met Ala Arg
                            280
Leu Arg Phe Val Glu Thr Ser Arg Ile Thr Trp Ala Gly Phe Gly Phe
                       295
Ala Phe Leu Ala Phe Val Ser Leu Leu Val Ala
                    310
<210> 9670
<211> 575
<212> PRT
<213> Enterobacter cloacae
<400> 9670
Leu Lys Arg Val Phe Met Ser Glu Glu Lys Lys Gly Gln Gln Tyr Leu
            5
                                    10
Ala Ala Leu His Gln Ala Phe Pro Gly Val Val Leu Glu Glu Ser Trp
                                25
Gln Thr Lys Asp Gln Ile Thr Val Thr Ile Lys Val Asn Tyr Leu Pro
                            40
Glu Val Val Glu Phe Leu Tyr Tyr Gln Gln Gly Gly Trp Leu Ser Val
                       55
                                            60
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Leu Phe Gly Asn Asp Glu Arg Gln Leu Cys Gly Ser Tyr Ala Val Tyr

Tyr Val Met Ser Met Glu Gln Gly Glu Lys Cys Trp Ile Thr Val Arg 85 90 Val Glu Val Asp Pro Asn Lys Pro Glu Tyr Pro Ser Val Thr Pro Arg 100 105 Val Pro Ala Ala Val Trp Gly Glu Arg Glu Val Arg Asp Met Tyr Gly 120 125 Leu Val Pro Val Gly Leu Pro Asp Glu Arg Arg Leu Val Leu Pro Asp 135 Asp Trp Pro Asp Glu Leu Tyr Pro Leu Arg Lys Asp Ser Met Asp Tyr 150 155 Arg Gln Arg Pro Ala Pro Thr Thr Asp Ser Glu Thr Tyr Glu Phe Ile 165 170 Asn Glu Leu Gly Ser Lys Lys Asn Asn Val Val Pro Ile Gly Pro Leu 180 185 His Val Thr Ser Asp Glu Pro Gly His Phe Arg Leu Phe Val Asp Gly 200 205 Glu Asn Ile Ile Asp Ala Asp Tyr Arg Leu Phe Tyr Val His Arg Gly 215 220 Met Glu Lys Leu Ala Glu Thr Arg Met Gly Tyr Asn Glu Val Thr Phe 235 230 Leu Ser Asp Arg Val Cys Gly Ile Cys Gly Phe Ala His Ser Thr Ala 245 250 Tyr Thr Thr Ser Val Glu Asn Gly Met Gly Ile Val Val Pro Glu Arg 260 265 Ala Gln Met Ile Arg Ala Ile Leu Leu Glu Val Glu Arg Leu His Ser 280 His Leu Leu Asn Leu Gly Leu Ala Cys His Phe Val Gly Phe Asp Ser 295 300 Gly Phe Met Gln Phe Phe Arg Val Arg Glu Ala Ser Met Lys Met Ala 310 315 Glu Ile Leu Thr Gly Ala Arg Lys Thr Tyr Gly Leu Asn Leu Ile Gly 325 330 Gly Ile Arg Arg Asp Leu Leu Lys Asp Asp Met Ile Gln Thr Arg Gln 340 345 Leu Ala Gln Gln Met Arg Arg Asp Val Gln Glu Leu Val Asp Met Leu 360 Leu Ser Thr Pro Asn Ile Glu Gln Arg Thr Val Gly Ile Gly Arg Leu 375 380 Asp Pro Glu Ile Ala Arg Asp Phe Ser Asn Val Gly Pro Met Val Arg 390 395 Ala Ser Gly His Ala Arg Asp Thr Arg Ala Asp His Pro Phe Val Gly 410 Tyr Gly Leu Leu Pro Met Thr Val His Ser Glu Gln Gly Cys Asp Val 425 Ile Ser Arg Leu Lys Val Arg Ile Asn Glu Val Phe Thr Ala Leu Asn 440 Met Ile Asp Tyr Gly Leu Asp Asn Leu Pro Gly Gly Pro Leu Met Val 455 460 Glu Gly Phe Thr Tyr Ile Pro Asn Arg Phe Ala Leu Gly Phe Ala Glu 470 475 Ala Pro Arg Gly Asp Asp Ile His Trp Ser Met Thr Gly Asp Asn Gln 490 485 Lys Leu Tyr Arg Trp Arg Cys Arg Ala Ala Thr Tyr Ala Asn Trp Pro 505 Thr Leu Arg Tyr Met Leu Arg Gly Asn Thr Val Ser Asp Ala Pro Leu 520 525 Ile Ile Gly Ser Leu Asp Pro Cys Tyr Ser Cys Thr Asp Arg Met Thr 535 540 Val Val Asp Val Arg Lys Lys Ser Gln Val Val Pro Tyr Lys Glu 550 555 Leu Glu Arg Tyr Ser Ile Glu Arg Lys Asn Ser Pro Leu Lys

570

<213> Enterobacter cloacae

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<400>
Gly Ph
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Gln Th
Arg Gl
Cys Va
50
Lys Th
65
Cys Gl
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<210> 9671 <211> 184 <212> PRT

Arg Gly Lys Pro Glu His Asn Pro Gln Gln Cys Ile Gly Cys Ala Ala
35 40 45
Cys Val Asn Ala Cys Pro Ser Asn Ala Leu Thr Val Glu Thr Asp Leu
50 55 60

Lys Thr Gly Glu Leu Ala Trp Gln Phe Asn Leu Gly Arg Cys Ile Phe 65 70 75 80

Cys Gly Arg Cys Glu Glu Val Cys Pro Thr Val Ala Ile Arg Leu Ser 85 90 95

Gln Glu Tyr Glu Leu Ala Val Trp Lys Lys Glu Asp Phe Leu Gln Gln 100 105 110

Ser Arg Phe Ala Leu Cys Asn Cys Arg Val Cys Lys Arg Pro Phe Ala 115 120 125

Val Gln Lys Glu Ile Asp Tyr Ala Ile Ala Leu Leu Lys His Asn Gly 130 135 140
Asp Val Arg Ala Glu His His Arg Glu Ser Phe Glu Thr Cys Pro Glu

145 150 155 160

Cvs Lvs Arg Gln Lvs Cvs Leu Leu Pro Ser Asp Arg Ile Asp Leu Thr

Cys Lys Arg Gln Lys Cys Leu Leu Pro Ser Asp Arg Ile Asp Leu Thr 165 170 175

Arg His Met Arg Glu Ala Ser

<210> 9672 <211> 791

<212> PRT

<213> Enterobacter cloacae

# <400> 9672

Pro Leu Leu Pro Pro Arg Arg Ser Gly Val Tyr Gly Ser Leu Ser 1.0 Asp Ala Cys Ala Gly Leu Arg Arg Ser Arg Gln Ala Arg Thr Asp Glu · Cys Arg Lys Thr Ser Pro Arg Gly Val Arg His Leu Val Ile Thr Ala 40 Val Leu Asn Arg Met Ser Ser Asn Gly Val Gln Leu Arg Val Arg Gly 55 Lys Val Gln Gly Val Gly Phe Arg Pro Phe Val Trp Gln Leu Ala His 70 75 Arg Leu Lys Leu Val Gly Asp Val Cys Asn Asp Gly Glu Gly Val Leu 90 Val Arg Leu Ala Gly Ser Gly Gly Asp Phe Thr Ala Arg Leu Arg Gln 105 Asp Cys Pro Pro Leu Ala Arg Ile Asp Arg Val Glu Thr Gln Pro Tyr 120 Ser Trp Asn Thr Leu Pro Asp Glu Phe Val Ile Arg His Ser Glu Ser 135 Gly Ala Met Asp Thr Gln Ile Val Pro Asp Ala Ala Thr Cys Pro Ala 150 155 Cys Leu Ala Glu Met Arg Asp Pro Arg Glu Arg Arg Tyr Arg Tyr Pro 170

Phe Ile Asn Cys Thr His Cys Gly Pro Arg Phe Thr Ile Ile Arg Ala 180 185 Met Pro Tyr Asp Arg Pro Ala Thr Ser Met Ala Pro Phe Pro Leu Cys 200 205 Met Pro Cys Glu Thr Glu Tyr Arg Asn Pro Ala Asp Arg Arg Phe His 215 220 Ala Gln Pro Val Ala Cys Pro Asp Cys Gly Pro Gln Leu Glu Trp Arg 230 235 Ala Gly Glu Ala Thr Ala Thr Arg Glu Ser Ala Leu Ser Ala Ala Val 245 250 Ala Met Leu Glu Gly Gly Ile Val Ala Val Lys Gly Leu Gly Gly 260 265 Phe His Leu Val Cys Asp Ala Leu Asn Pro Gln Ala Ile Arg Lys Leu 280 285 Arg Ala Arg Lys Gln Arg Pro Thr Arg Pro Leu Ala Val Met Ile Pro 295 300 His Ala Asn Asp Leu Pro Lys Thr Ile Gln Thr Leu Leu Arg Ser Pro 310 315 Ala Ala Pro Ile Met Leu Thr Pro Lys Ala Cys Leu Pro Ala Phe Pro 325 330 Glu Glu Ile Ala Pro Gly Leu Asn Thr Val Gly Val Met Leu Pro Ala 340 345 Asn Pro Leu Gln His Leu Leu Met Leu Asp Cys Gln Arg Pro Leu Val 360 365 Met Thr Ser Gly Asn Leu Ser Gly Tyr Pro Pro Val Ile Asn Asn Gln 375 380 Gln Ala Leu Glu Glu Leu Ser Asp Ile Ala Asp Gly Phe Leu Leu His 390 395 Asn Arg Asp Ile Leu Gln Arg Met Asp Asp Ser Val Met Asp Gln Glu 405 410 Gly Thr Met Leu Arg Arg Ala Arg Gly Phe Val Pro Asp Ala Ile Thr 420 425 Leu Pro Ala Gly Phe Arg Asp Ile Pro Pro Met Leu Cys Thr Gly Ala 440 Glu Met Lys Asn Thr Phe Cys Leu Val Arg Gly Asn Gln Ala Val Leu 455 Ser Gln His Phe Gly Asp Leu Ser Asp Glu Gly Val Glu Ala Gln Trp 470 475 Arg Ser Ala Leu Ser Thr Met Gln Glu Ile Tyr Ala Phe Gln Pro Glu 485 490 Arg Val Val Cys Asp Ala His Pro Gly Tyr His Ala Arg Gln Trp Ala 505 Arg Thr Gln Ala Leu Pro Val Glu Thr Val Leu His His Ala His 520 Ala Val Ala Cys Leu Ala Glu Asn Gly Trp Pro Leu Asp Gly Gly Asp 535 540 Val Ile Ala Leu Thr Leu Asp Gly Ile Gly Met Gly Glu Asn Gly Ala 550 555 Leu Trp Gly Glu Cys Leu Arg Val Asn Tyr Arg Asp Cys Glu Arg 565 570 Leu Gly Gly Leu Pro Ala Val Ala Leu Pro Gly Gly Asp Leu Ala Ala 580 585 Lys Gln Pro Trp Arg Asn Leu Leu Ala His Cys Leu Ala Phe Val Pro 600 605 Asp Trp Gln Gln Tyr Pro Glu Thr Val Val Gln Arg Gln Asn Trp 615 620 Pro Leu Leu Ala Thr Ala Val Ser Arg Gly Ile Asn Ala Pro Arg Ala 630 635 Ser Ser Cys Gly Arg Leu Phe Asp Ala Val Ala Cys Ala Leu Gly Ile 645 650 Glu Thr Gln Arg Tyr Glu Gly Glu Ala Ala Cys Arg Leu Glu Ala Leu

660 665 670 Ala Glu Arg Cys Ala Gly Val Asp His Pro Val Thr Leu Gln Thr Asp 680 685 Asn Leu Ala Leu Phe Trp Gln Gln Trp Leu Ala Trp Arg Ala Glu Pro 695 700 Gly Glu Arg Ala Trp Ala Phe His Asp Ala Leu Ala Lys Gly Leu Ser 710 715 Glu Leu Ala Ala Thr His Ala Arg Arg Arg Ser Leu Ser Thr Val Cys 725 730 Phe Ser Gly Gly Val Leu His Asn Arg Leu Leu Arg Ala Arg Leu Arg 740 745 His Tyr Leu Ser Asp Phe Thr Leu Leu Phe Pro Ser Arg Leu Pro Ala 760 Gly Asp Gly Ala Ile Ser Phe Gly Gln Ala Val Val Ala Ala Arg 775 Ser Cys Ser Gln Arg Ile 785 <210> 9673 <211> 357 <212> PRT <213> Enterobacter cloacae <400> 9673 Thr Lys Gly Ala Gly Ala Phe Val Thr Glu Ala Gln Ala Gly His Leu Phe His Gln Ser Gly Asn Phe Arg His His Wal Ile His Gly Gly 25 Gly Thr His Gln His Ala Phe Gly Ala Glu Asp Val Gly Gln Tyr Leu 40 Ile Leu Ile Ala Ala Arg His Val Glu Asp Phe His Arg His Val Arg 55 Val Asn Phe Val Asp Ala Leu Gly Asn Gly Val Arg His His Ala Gly Val Val Gly His Gly Val Val Glu Asp Arg Asn Ala Val Phe Leu Ile 90 Val Arg Arg Pro Leu Gln Val Gln Phe Asp Asn Leu Gly Trp Ile Phe 100 Thr Pro Tyr His Ala Val Gly Gly Asn His Ile His Arg Gln Val 120 Glu Ala Glu Asp Leu Gly Asp Phe Trp Arg Asp Gln Thr Ala Glu Arg 135 140 Gly Gln Asp Val Gly Val Val Ala Leu Ala Leu Phe Glu Gln Leu Gly 150 155 Leu Ile His Phe Val Val Glu Gln Thr Phe Val Ala Val Val Leu Ala 165 170 Glu Gly Val Val Thr Glu Gln His Arg Val Thr Gly His Val Gly His 180 185 His Ala Val Arg Pro Val Gln His Trp Gly Phe His Glu Asp Gln Leu 200 205 Phe Ala Val Ala Asp Ile Gln Arg Val Ala Gly Phe His Ser Val Glu 220 215 Val Pro Leu Arg Met Val Val Val Ala Val Asp Gly Val Asn Gly Val 230 235 Ser Gly Ala Val Asp Arg Gly Ile Arg Asn Val Gly His Gln Leu Gly 245 250 Gln Arg Pro Gly Met Ile Leu Phe Arg Val Val Asp Asp Asn Val Val 265 270 Asp Leu Ile Gln Ile Asp Phe Ala Ala Gln Val Leu His Glu Leu Ala 280

Ala Glu Phe Val Ile Asp Gly Ile Asp Gln Asp Val Phe Thr Phe Thr

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295
                                            300
Asn Glu Ile Ala Val Val Ala Ala Ala Gln Arg Phe Val Phe Arg
                   310
                                       315
Pro Val Lys Ile Thr Tyr Phe Pro Val Thr Leu Thr His Pro Met Asn
               325
                                   330
Val Ile Phe Asn Gln Asn Arg His Ser Asn Leu Asn Leu Ile Arg Arg
                                345
            340
Phe Gln Ile Arg
        355
<210> 9674
<211> 302
<212> PRT
<213> Enterobacter cloacae
<400> 9674
Gln Leu Thr Arg Gln Ala Met Leu Asn Leu Gln Arg Thr Ala Met Phe
                                    10
Ile Ala Val Ala Asp Thr Gly Ser Phe Thr Ala Ala Ala Glu Ala Met
            20
                                25
Gly Leu Thr Lys Ala Val Val Ser Phe His Ile Arg Gln Leu Glu Glu
                            40
Glu Leu Gly Val Thr Leu Leu Leu Arg Thr Thr Arg Arg Leu Thr Leu
                        55
Thr Glu Ala Gly Lys Leu Phe His Gln Arg Ser Val Met Leu Leu Arg
                    70
                                        75
Asp Ala Glu Arg Leu Gln Asp Asp Val Arg Ala Asn His Ala Gly Leu
                85
                                    90
Thr Gly Glu Leu Arg Ile Thr Thr Thr Pro Glu Tyr Gly Ser Gln Val
            100
                                105
Val Val Pro Leu Leu Ala Glu Phe Ser Gln Leu His Pro Asp Leu Arg
                            120
                                                125
Val Arg His Val Ser Ser Leu His Ala Asp Leu Ile Ala Glu Arg
                        135
                                            140
Phe Asp Val Ala Ile Arg Leu Gly Thr Leu Ala Asp Ser Arg Tyr His
                    150
                                        155
Ala Ala Leu Met Thr Ser Phe Thr Ile Leu Pro Val Ala Thr Pro Gly
                165
                                    170
Trp Leu Ala Asn His Pro Val Asp Ser Leu Glu Gln Leu Ala Glu Ala
            180
                                185
Asp Trp Ile Ile His Glu Arg Leu Thr Ser Pro Leu Arg Trp Gln Val
                            200
Arg Gly Val Asp Gly His Pro Val Ser Phe Glu Ile Lys Lys Ala Pro
                        215
Arg Leu Tyr Ala Asp Ser Ala Gln Ala Leu Met Ala Phe Ala Leu Ala
                    230
                                        235
Gly Cys Gly Val Ala Leu Leu Pro Glu Trp Leu Val Arg Asn Ala Leu
                245
                                    250
Asp Ala Gly Glu Leu Val Ser Leu Leu Pro Ala Tyr Thr Phe Ala Gln
                                265
Gln Gly Ile Tyr Ala Val Tyr Pro Asp Ala Arg His Val Pro Ala Lys
                            280
Val Arg Thr Phe Ile Asp Phe Met Arg Val Arg Val Thr
    290
                        295
<210> 9675
<211> 86
<212> PRT
<213> Enterobacter cloacae
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 Pro
 Arg
 Cys
 Trp
 Arg
 His
 Val
 Asn
 Lys
 Glu
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 Lys
 Met
 Ile
 Cys
 Pro

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<210> 9676 <211> 300

<212> PRT

<213> Enterobacter cloacae

<400> 9676 Gln Gly Leu Thr Ala Glu Tyr Asn Tyr Thr Ser Pro Arg Gln Leu Thr 10 Ile Leu Phe Ile Val Ser Glu Arg His Met Phe Trp Ile Ile Asn Asp Lys Ile Lys Phe Cys Pro Glu Arg Asn Leu Leu Ile Ser Leu Thr Arg 35 . 40 Pro Asp Leu Asn Val Ile Leu Thr Thr Pro Ala Ser Arg Cys Leu Asn Leu Leu Glu Ser Phe Pro Glu Val Val Thr Gln Lys Tyr Phe Phe Asp Lys Val Trp Gly Glu Asp Gly Met Leu Val Pro Ala Asn Thr Leu 85 Tyr Gln Asn Ile Ser Ile Ile Arg Arg Gly Leu Arg Thr Thr Gly Glu 105 Thr Asp Asp Thr Leu Val Ala Thr Val Pro Arg Lys Gly Phe Gln Ile 120 125 Glu Lys Asn Val Arg Val Thr Arg Val Asp Thr Asp Cys Val Asp Asp 135 140 Gly Lys Lys Ala Thr Ala Thr Gly Val Glu Thr Ser Pro Val Glu Thr 150 155 Lys Asp Lys Pro Val Glu Asn Ile Pro Val Met Pro Gly Gly Arg Lys 165 170 175 Lys Gln Arg Gln Leu Arg Gln Tyr Ile Phe Pro Thr Ala Leu Met Ile 185 190 Ile Ala Phe Cys Ala Gly Phe Phe Ala Phe Gln Tyr Leu Leu His Asp 200 205 Asn Pro Glu Lys Asp Phe Phe Arg Asp Tyr Pro Ile Thr Leu Thr Gln 215 220 Asn Gly Cys His Phe Ser Ser Gln Asn Asp Asp Ile Arg Gly Val Gly 230 235 Asn Phe Arg Arg Phe Ile Lys Ile Ile Leu Asp Thr Gly Leu Asp Cys 245 250 Lys Lys Tyr Pro Trp Val Tyr Phe Ser Ser Ser His Ala Pro Ala 265 Leu Ser Val Leu Ala Cys Arg Glu Pro Phe Glu Ile Lys Ala Asn Ala 280 Gly Cys Ile Ser Leu Tyr Phe Arg Gly His Leu

<210> 9677

<211> 141

<212> PRT

#### <213> Enterobacter cloacae

<400> 9677 Gly Ala Tyr Pro Met Ser Glu Thr Val Val Phe Ser Gln Leu Ser Arg 10 Lys Phe Ile Asp Glu Asn Asp Ala Thr Pro Asp Ala Ala Gln Gln Val 25 Val Tyr Tyr Ser Leu Ala Ile Gly His His Leu Gly Val Ile Asp Cys Leu Glu Ala Ala Leu Thr Cys Pro Trp Pro Glu Tyr Leu Ala Trp Ile 55 Val Thr Leu Glu Glu Gly Ser Thr Ala Arg Arg Lys Met Glu Gly Val 75 70 Pro Lys Tyr Gly Glu Ile Val Ile Asp Ala Asn His Ile Ala Met Leu 85 90 Ala Asn Ala Phe Asp Ala Ala Leu Ser Val Gln Thr Pro Ala Gln Gln 105 100 Ala Trp Ser Lys Thr Leu Leu Gly Met Leu His Asp Ile His Gln Glu 120 Ser Ala Ile Tyr Leu Met Val Arg Arg Leu Arg Asp 135

<210> 9678

<211> 351

<212> PRT

<213> Enterobacter cloacae

<400> 9678

Ser Thr Leu Arg Leu Ile Gly Phe Glu Trp Asn Asn Thr Met Thr Thr Met Leu Glu Val Ala Lys Arg Ala Gly Val Ser Lys Ala Thr Val Ser Arg Val Leu Ser Gly Asn Gly Tyr Val Ser Gln Glu Thr Lys Asp Arg 40 Val Phe Gln Ala Ile Glu Glu Ser Gly Tyr Arg Pro Asn Leu Leu Ala Arg Asn Leu Ala Thr Lys Arg Thr Gln Thr Leu Gly Leu Val Val Thr 70 Asn Thr Leu Tyr His Gly Val Tyr Phe Ser Glu Leu Leu Phe Asn Ala Ala Arg Met Thr Glu Glu Lys Gly Arg Gln Leu Ile Leu Ala Asp Gly 105 Lys His Ser Ala Glu Glu Glu Arg Glu Ala Ile Gln Tyr Leu Leu Asp 120 115 Met Arg Cys Asp Ala Val Ile Ile Tyr Pro Arg Phe Leu Ser Val Glu 135 140 Ala Leu Asp Glu Ile Ile Glu Lys Cys Glu Gln Pro Ile Met Val Leu 150 155 Asn Arg Arg Leu Arg Lys Asn Ser Ser His Ser Val Trp Ser Asp His 170 165 Lys Ala Ser Cys Gln Asp Ala Val Ser Gln Leu Ile Ala Lys Gly His 185 180 190 Arg Glu Ile Ala Phe Ile Thr Gly Ser Leu Asp Ser Pro Thr Gly Val 200 205 Glu Arg Leu Ser Gly Tyr Arg Glu Ala Leu Ala Gln His Gly Ile Ala 215 220 Val Arg Asp Ala Leu Ile Ala Glu Gly Lys Trp Ser Pro Ala Ser Gly 230 235 Ala Ala Ala Val Ser Gln Leu Leu Thr Arg Gly Glu Ala Phe Thr Ala 245 250

Leu Val Ala Ser Asn Asp Asp Met Ala Ile Gly Ala Ile Arg Gln Leu

5247 265 260 270 His Glu Ser Gly Val Ala Thr Pro Gly Ala Val Ser Val Ile Gly Phe 280 Asp Asp Val Ala Ile Ala Pro Tyr Ile Val Pro Ser Leu Ser Ser Val 295 Arg Ile Pro Val Thr Glu Met Ile Gln Glu Thr Ile Ser Arg Leu Ile 310 315 Phe Met Leu Asp Gly Gly Glu Phe Lys Leu Gln Gln Thr Phe Ser Gly 325 330 Glu Leu Ile Leu Arg Asp Ser Val Ile Asp Gly Pro His Arg <210> 9679 <211> 194 <212> PRT <213> Enterobacter cloacae <400> 9679 Ile Ala Ser Arg Ile Thr Val Met Pro Glu Lys Gln Met Asn Arg Phe · 10 Ile Met Ala Asp Ala Ser Lys Cys Ile Gly Cys Arg Thr Cys Glù Val 20 Ala Cys Val Val Ser His Gln Ala Glu Gln Asp Cys Ala Ser Leu Thr Pro Asp Thr Phe Leu Pro Arg Ile His Val Ile Lys Gly Val Asn Ile 55 Ser Thr Ala Ala Ile Cys Arg Gln Cys Glu Asp Ala Pro Cys Ala Asn 70 Val Cys Pro Asn Gly Ala Ile Lys Arg Glu Lys Gly Phe Val His Val Met Gln Glu Arg Cys Ile Gly Cys Lys Thr Cys Val Val Ala Cys Pro 105 Tyr Gly Ala Met Glu Val Val Val Arg Pro Val Val Arg Asn Ser Gly 120 Ile Gly Leu Ser Val Arg Ala Glu Lys Ala Glu Ala Asn Lys Cys Asp 135 Leu Cys Tyr His Arg Asp Ala Gly Pro Ala Cys Met Glu Ala Cys Pro 150 155 Thr His Ala Leu Val Cys Val Asp Arg Asp Lys Leu Glu Gln Met Ser 165 170 Ala Glu Lys Arg Arg Arg Ala Ala Phe Asp Thr Ser Ser Ser Leu Leu 180 185 Phe <210> 9680 <211> 413 <212> PRT <213> Enterobacter cloacae

### <400> 9680

```
Pro Arg Ala Ala Cys Leu Leu Leu Ala Leu Gly Met Ala Asn Leu Leu
                85
                                     90
Ala Trp Gly Leu Ala Trp His Thr Phe Ser Asp Ser Thr Ala Leu Met
            100
                                105
Ala Ala Ser Leu Leu Ala Trp Cys Tyr Gly Leu Arg His Ala Val Asp
                            120
Ala Asp His Ile Ala Ala Ile Asp Thr Val Thr Arg Lys Met Met Gln
                        135
                                             140
Gln Gly Lys Arg Pro Ser Gly Val Gly Ala Trp Phe Ser Leu Gly His
                    150
                                         155
Ser Thr Ile Val Val Leu Ala Ser Ile Ala Ile Ala Ala Thr Ala Thr
                165
                                     170
Ala Phe Gln Lys Asn Met Ala Trp Phe His Glu Thr Gly Ser Leu Ile
            180
                                 185
Gly Thr Ala Val Ser Ala Thr Phe Leu Leu Ala Met Ala Leu Val Asn
                             200
Met Val Ile Leu Arg Gly Val Trp Arg Ser Phe Gln Ala Leu Lys His
                        215
                                             220
Gly Arg Pro Val Gln Gly Asp Ile Thr Leu Pro Ala Gln Gly Gly Val
                    230
                                         235
Met Asn Trp Leu Phe Gly Lys Thr Phe Arg'Leu Val Asn Lys Ser Trp
                245
                                     250
Gln Met Tyr Leu Val Gly Phe Leu Phe Gly Leu Gly Phe Asp Thr Ala
            260
                                                     270
                                 265
Thr Glu Ile Gly Val Leu Gly Ile Ser Ala Ala Ser Ala Ser Ser Gly
                             280
        275
Met Ser Val Trp Ser Ile Met Ile Phe Pro Ala Leu Phe Ala Ser Gly
                        295
                                             300
Met Ala Leu Val Asp Thr Leu Asp Asn Leu Leu Met Val Gly Ala Tyr
                    310
                                         315
Gly Trp Ala Phe Asn Lys Pro Gln Arg Lys Leu Tyr Tyr Asn Met Thr
                325
                                     330
Ile Thr Gly Thr Ser Val Val Val Ala Leu Phe Ile Gly Gly Leu Glu
            340
                                 345
Ala Leu Gly Leu Leu Met Asp Lys Phe Ser Leu Ser Gly Gly Val Trp
        355
                             360
Asp Leu Ile Gly Ala Val Asn Asp Asn Leu Gly Asp Ala Gly Phe Val
                         375
                                             380
Val Val Gly Leu Phe Val Ala Cys Trp Leu Ile Ser Met Ala Asn Tyr
                    390
Arg Trp Arg Gly Tyr Asp Ala Leu Val Val Arg Ser
                405
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<210> 9681 <211> 533

<212> PRT

<213> Enterobacter cloacae

<400> 9681

 Cys
 Ser
 Gln
 Met
 Gly
 Ser
 His
 Phe
 Asp
 Tyr
 Leu
 Lys
 Asn
 Cys
 Gln
 Tyr

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 15
 15
 Asp
 Asp
 Tyr
 Ala
 Glu
 Met
 Ser
 Phe
 Ser
 Ser
 Glu
 Ala
 Glu
 Met
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 Phe
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Thr Leu Glu Gly His Pro Arg Leu Glu Thr Ile Ala Arg Ala Gly Asp 105 Val Val Arg Phe Pro Ala Asp Ser Asp Leu Pro Asp Pro Tyr Asp Gly 120 Leu Ile Pro Gly Gln Glu Ser Leu Lys Val His Ala Cys Ile Gly Leu . 135 140 Pro Leu Phe Ala Gly Gln Asn Leu Ile Gly Ala Leu Thr Leu Asp Gly 150 155 Met Ser Pro Asp Gln Phe Asp Thr Phe Ser Asp Glu Glu Leu Arg Leu 170 165 Ile Ala Ala Leu Ala Ala Gly Ala Leu Asn Asn Ala Leu Leu Ile Glu 180 185 Gln Leu Glu Ser Gln Asn Ile Leu Pro Gly Ser Pro Thr Ala Phe Glu 200 Gln Val Ala His Thr Glu Met Ile Gly Leu Ser Pro Gly Met Ala Gln 215 220 Leu Lys Lys Glu Ile Glu Ile Val Ala Ala Ser Asp Leu Asn Val Leu 230 235 Ile Phe Gly Glu Thr Gly Thr Gly Lys Glu Leu Val Ala Lys Ala Ile 245 250 His Glu Ala Ser Pro Arg Ala Val Asn Pro Leu Val Tyr Leu Asn Cys 265 Ala Ala Leu Pro Glu Ser Val Ala Glu Ser Glu Leu Phe Gly His Val 280 Lys Gly Ala Phe Thr Gly Ala Ile Ser Asn Arg Ser Gly Lys Phe Glu 295 Met Ala Asp Asn Gly Thr Leu Phe Leu Asp Glu Ile Gly Glu Leu Ser 310 315 Leu Ser Leu Gln Ala Lys Leu Leu Arg Val Leu Gln Tyr Gly Asp Ile 325 330 Gln Arg Val Gly Asp Asp Arg Ser Leu Arg Val Asp Val Arg Val Leu 345 340 Ala Ala Thr Asn Arg Asp Leu Arg Glu Glu Val Leu Ala Gly Asn Phe 360 Arg Ala Asp Leu Phe His Arg Leu Ser Val Phe Pro Leu Thr Val Pro 375 380 Pro Leu Arg Glu Arg Gly Glu Asp Val Val Leu Leu Ala Gly Phe Phe 390 395 Cys Glu Gln Cys Arg Leu Lys Met Gly Leu Ser Arg Val Val Leu Ser 405 410 Pro Gly Ala Arg Thr His Leu Leu Ser Tyr Gly Trp Pro Gly Asn Val 425 430 420 Arg Glu Leu Glu His Ala Ile His Arg Ala Val Leu Ala Arg Ala 440 Thr Arg Ser Gly Asp Glu Val Val Ile His Ala Arg His Phe Ala Leu 455 460 His Glu Glu Thr Thr Pro Ser Val Lys Pro Val Ile Pro Glu Ser Val 470 475 Asn Glu Asn Leu Arg Glu Ala Thr Asn Ala Phe Gln Arg Gln Met Ile 490 Ala Arg Ala Leu Glu Gln Asn Asn Arg Ser Trp Ala Ala Cys Ala Arg 505 Ala Leu Glu Met Asp Val Ala Asn Leu His Arg Leu Ala Lys Arg Leu 515 520 Gly Leu Lys Gly 530

<sup>&</sup>lt;210> 9682

<sup>&</sup>lt;211> 283

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
<400> 9682
Gly Ser Gly Ser Ala Gly Cys His Pro Arg Leu His Val Lys Ile Tyr
                                    10
Phe Val Ile Lys Glu Arg His Met Ser Gln Val Ala Val Val Ile Gly
Gly Gly Gln Thr Leu Gly Glu Phe Leu Cys His Gly Leu Ala Ala Glu
Gly Tyr Arg Val Ala Val Val Asp Ile Gln Ser Glu Lys Ala Ala Arg
                        55
Val Ala Asp Ala Ile Asn Thr Glu Phe Gly Glu Gly Met Ala Tyr Gly
                    70
                                        75
Phe Gly Ala Asp Ala Thr Ser Glu Gln Ser Val Met Ala Leu Ala Arg
                8.5
Gly Val Asp Glu Ile Phe Gly Arg Ile Asp Leu Leu Val Tyr Ser Ala
            100
                                105
Gly Ile Ala Lys Ala Ala Phe Ile Ser Asp Phe Glu Leu Gly Asp Phe
                            120
Asp Arg Ser Leu Gln Val Asn Leu Val Gly Tyr Phe Leu Cys Ala Arg
                        135
                                            140
Glu Phe Ser Arg Leu Met Ile Arg Asp Gly Ile Gln Gly Arg Ile Ile
                    150
                                        155
Gln Ile Asn Ser Lys Ser Gly Lys Val Gly Ser Lys His Asn Ser Gly
                165
                                    170
Tyr Ser Ala Ala Lys Phe Gly Gly Val Gly Leu Thr Gln Ser Leu Ala
            180
                                185
Leu Asp Leu Ala Glu Tyr Gly Ile Thr Val His Ala Leu Met Leu Gly
                            200
Asn Leu Leu Lys Ser Pro Met Phe Gln Ser Leu Leu Pro Gln Tyr Ala
                                            220
                        215
Ala Lys Leu Gly Ile Lys Ala Glu Glu Val Glu Gln Tyr Tyr Ile Asp
                    230
Lys Val Pro Leu Lys Arg Gly Cys Asp Tyr Gln Asp Val Leu Asn Met
                245
                                    250
Leu Leu Phe Tyr Ala Ser Pro Lys Ala Ser Tyr Cys Thr Gly Gln Ser
Ile Asn Val Thr Gly Gly Gln Val Met Phe
<210> 9683
<211> 120
<212> PRT
<213> Enterobacter cloacae
<400> 9683
Gly Gly Val Met His Glu Ile Thr Leu Cys Gln Arg Ala Leu Glu Leu
                                    10
Ile Glu Gln Gln Ala Val Gln Asn His Ala Lys Arg Val Thr Gly Val
                                25
Trp Leu Lys Val Gly Ala Phe Ser Cys Val Glu Thr Ser Ala Leu Thr
                            40
Phe Cys Phe Glu Leu Val Cys Arg Gly Thr Leu Ala Glu Gly Cys Ala
                        55
Leu His Ile Glu Glu Gln Gln Ala Glu Cys Trp Cys Glu Gln Cys Gln
                    70
                                        75
Glu Tyr Val Thr Leu Leu Ser Ser Lys Val Gln Arg Cys Pro Gln Cys
                                    90
Gln Ser Ser Gly Leu Arg Ile Val Ala Asp Asp Gly Met Gln Ile Gln
Arg Leu Glu Ile Glu Lys Glu
```

<210> 9684

```
<211> 289
<212> PRT
<213> Enterobacter cloacae
<400> 9684
Ser Met Cys Ser Thr Cys Gly Cys Ala Glu Gly Asn Leu Tyr Ile Glu
Gly Asp Glu His Arg Pro His Ser Ala Phe Arg Ser Ala Pro Phe Ser
Pro Ala Pro Arg Pro Ala Ala Ala Leu Thr Gly Ile Thr Phe Ala Pro
Gln Arg Ser Asp Ala Gly Asp Leu His Tyr Gly Arg Gly Glu Ala Gly
                        55
Thr His Ala Pro Gly Ile Ser Gln Arg Gln Met Leu Glu Val Glu Ile
                    70
                                        75
Asn Val Leu Asp Lys Asn Asn Gln Leu Ala Val Arg Asn Arg Ala Arg
                85
                                    90
Phe Ala Ala Arg Glu Gln Leu Val Leu Asn Leu Val Ser Ser Pro Gly
                                105
            100
Ser Gly Lys Thr Thr Leu Leu Thr Glu Thr Leu Lys Arg Leu Asn Lys
        115
                            120
                                                 125
Arg Val Ser Cys Ala Val Ile Glu Gly Asp Gln Gln Thr Val Asn Asp
                        135
                                             140
Ala Ala Arg Ile Arg Glu Thr Gly Thr Pro Ala Ile Gln Val Asn Thr
                    150
                                        155
Gly Lys Gly Cys His Leu Asp Ala Gln Met Ile Ala Asp Ala Aro
                                    170
Arg Leu Pro Leu Ala Asn Asn Gly Ile Leu Phe Ile Glu Asn Val Gly
            180
                                185
Asn Leu Val Cys Pro Ala Ser Phe Asp Leu Gly Glu Arg His Lys Val
                            200
                                                 205
Ala Val Leu Ser Val Thr Glu Gly Glu Asp Lys Pro Leu Lys Tyr Pro
                        215
His Met Phe Ala Ala Ala Ser Leu Met Leu Leu Asn Lys Val Asp Leu
                    230
                                         235
Leu Pro Tyr Leu Asn Phe Asp Val Asp Lys Cys Leu Ala Tyr Ala Arg
                                    250
Glu Val Asn Pro Asp Ile Glu Ile Leu Leu Val Ser Ala Thr Arg Gly
                                265
Asp Gly Met Asp Ala Trp Leu Asn Trp Leu Glu Asn Glu Arg Cys Ala
<210> 9685
<211> 703
<212> PRT
<213> Enterobacter cloacae
<400> 9685
Ile Ser Leu Phe Ala Ser Phe Tyr Trp Lys Ala Thr Met Pro Tyr Thr
```

10

45

Pro Met Ser Asp Leu Gly Gln Gln Gly Leu Phe Asp Ile Thr Arg Thr

Leu Val Arg Gln Ser Ala Leu Ala Asp Ser Ala Ala Ile Val Leu Trp

His Ser Ala Thr His Arg Ala Ser Tyr Phe Ser Thr Arg Asp Asn Gly

55

25 Leu Leu Gln Gln Pro Asp Leu Gly Ala Leu Ser Asp Ala Leu Thr Arg 40

65					70					75					80
	Ile	Phe	Glu	Tyr 85	_	Asp	Glu	Thr	Phe 90	_	Ala	His	Gly	Pro 95	
Arg	Arg	Ile	Leu 100	Ser	Arg	Pro	Glu	Ala 105	Leu	His	Cys	Asn	Phe 110	Asp	Gln
Phe	Arg	Gln 115	Ala	Trp	Pro	Lys	Leu 120	Ala	Glu	Ser	Asn	Leu 125	Tyr	His	Pro
Phe	Gly 130	His	Tyr	Ser	Met	Leu 135	Pro	Leu	Ala	Val	Glu 140	Gly	Gln	Ile	Phe
Gly 145	Gly	Cys	Glu	Phe	Ile 150	Arg	Asp	Thr	Asp	Gln 155	Pro	Trp	Ser	Glu	Ala 160
Glu	Tyr	Glu	Arg	Leu 165	His	Thr	Phe	Thr	Gln 170	Ile	Val	Ala	Val	Val 175	Ala
			Gln 180		_			185					190		
		195	Arg				200					205			
	210		Arg			215					220				
225			His		230	_				235					240
_		_	Lys	245					250					255	
			Pro 260					265			•		270		
		275	Arg				280					285			
	290		Asp			295					300				
305	_		Lys		310					315					320
			Leu	325					330					335	
			Ala 340			_		345	-				350		
		355	Leu				360					365			
-	370	-	Leu		_	375					380				
385		_	Ser		390	_				395	_				400
			Leu	405					410					415	
			Leu 420					425					430		
		435	Asn				440					445		_	
	450		Ala			455	-				460	_			_
465			Gly		470					475					480
			Ala	485					490		_			495	
			Glu 500					505					510		
		515	Arg		_		520	_				525	_		_
	530		Ala			535	_		_	_	540				
Glu 545	Phe	Arg	Ser	Asp	Leu 550	Tyr	Tyr	Arg	Leu	Asn 555	vaı	rne	rro	тте	Cys 560

Leu Pro Pro Leu Arg Glu Arg Pro Glu Asp Ile Pro Leu Leu Val Lys 565 570 Ala Phe Thr Ala Lys Ile Ala Arg Arg Met Gly Arg Asn Ile Asp Ser 585 Ile Pro Ala Glu Thr Leu Arg Thr Leu Ser Ala Met Glu Trp Pro Gly 600 Asn Val Arg Glu Leu Glu Asn Val Ile Glu Arg Ala Val Leu Leu Thr 615 620 Arg Gly Asn Val Leu Gln Leu Ser Leu Pro Glu Val Ser Leu Ala Glu 630 635 Thr Thr Val Ala Ala Thr Glu Val Ala Lys Asp Gly Glu Asp Glu Tyr 645 650 Gln Leu Ile Leu Arg Val Leu Arg Glu Thr Asn Gly Val Val Ala Gly 665 660 Pro Lys Gly Ala Ala Gln Arg Leu Glu Leu Lys Arg Thr Thr Leu Leu 675 680 Ser Arg Met Lys Arg Leu Gly Ile Asp Lys Glu Ser Leu Asn 690 695 <210> 9686 <211> 110 <212> PRT <213> Enterobacter cloacae <400> 9686 Arg Val Phe Thr Val Ile Leu Tyr Arg Gln Ser Glu His Thr Leu Pro Thr Val Thr Gly Gly Ser Met Gln Gly Met Ala Ile Thr Lys Pro Tyr 25. Arg His Leu Lys Val Gly Tyr Phe Arg Lys Arg His Glu Asp Arg Lys Thr Lys Ile Pro Thr Arg Tyr Ser Val His Ala Ala Leu Asn Leu Lys Gly Asp Trp Leu Glu Lys Ala Gly Phe Leu Thr His Ser Gln Val Arg Val Glu Val Gly Pro Gly Lys Ile Ile Ile Glu Leu Ile Lys Glu Pro Asp Asp Gly His Pro Gly His Val Val Gln Arg Glu Gln 105 110 <210> 9687 <211> 330 <212> PRT <213> Enterobacter cloacae <400> 9687 Thr Glu Ser Pro Ser Phe Arg Ser His Ser Met Asn Arg Ile Arg Ile 10 Glu Lys Gly Thr Gly Gly Trp Gly Gly Pro Leu Glu Phe Asp Ala Thr 25 Glu Gly Lys Lys Ile Val Tyr Ile Thr Ala Gly Thr Arg Pro Ala Ile 40 Val Asp Lys Leu Arg Glu Leu Thr Gly Trp Glu Ala Val Asp Gly Phe Lys Glu Gly Glu Pro Pro Glu Ala Glu Ile Gly Val Ala Val Ile Asp Cys Gly Gly Thr Leu Arg Cys Gly Ile Tyr Pro Lys Arg Arg Ile Pro Thr Val Asn Ile His Ser Thr Gly Lys Ser Gly Pro Leu Ala Gln Tyr 105

Ile Val Glu Asp Ile Tyr Val Ser Gly Val Lys Glu Asp Asn Ile Thr

```
120
                                                125
        115
Leu Val Asn Gly Thr Ser Ala Pro Gln Lys Ala Ala Pro Arg Glu Tyr
                       135
                                           140
Asp Thr Ser Lys Lys Ile Thr Glu Gln Ser Asp Gly Leu Leu Ala Lys
                   150
                                       155
Val Gly Met Gly Met Gly Ser Ala Val Ala Val Leu Phe Gln Ser Gly
               165
                                    170
Arg Asp Thr Ile Asp Thr Val Leu Lys Thr Ile Leu Pro Phe Met Ala
                                185
Phe Val Ser Ala Leu Ile Gly Ile Ile Met Ala Ser Gly Leu Gly Asp
                            200
Trp Ile Ala His Gly Leu Ala Pro Leu Ala Ser His Pro Leu Gly Leu
                        215
Val Thr Leu Ala Leu Ile Cys Ser Phe Pro Leu Leu Ser Pro Phe Leu
                    230
                                        235
Gly Pro Gly Ala Val Ile Ala Gln Val Ile Gly Val Leu Ile Gly Val
                245
                                    250
Gln Ile Gly Leu Gly Asn Ile Leu Pro His Leu Ala Leu Pro Ala Leu
            260
                                265
                                                    270
Phe Ala Ile Asn Ala Gln Ala Ala Cys Asp Phe Ile Pro Val Gly Leu
        275
                            280
Ser Leu Ala Glu Ala Arg Gln Glu Thr Val Arg Val Gly Val Pro Ser
                        295
                                            300
Val Leu Val Ser Arg Phe Leu Thr Gly Ala Pro Thr Val Leu Ile Ala
                    310
                                        315
Trp Phe Val Ser Gly Phe Ile Tyr Gln
                325
<210> 9688
<211> 125
<212> PRT
<213> Enterobacter cloacae
<400> 9688
Glu Val Pro Ala Met Thr Val Ile Tyr Gln Thr Thr Ile Thr Arg Ile
                                    10
Gly Gln Ser Ala Ala Asp Ala Leu Ser Asp Gln Met Leu Ile Thr Phe
                                25
Arg Glu Gly Ala Pro Ala Asp Ile Glu Glu Phe Cys Phe Ile His Cys
                            40
His Gly Glu Leu Asn Gly Glu Leu Lys Ala Gly Ser Gln Leu Glu Leu
                        55
Gly Lys Ala Arg Tyr Ala Val Thr Ala Val Gly Asp Val Ala Glu Gln
                    70
Asn Leu Arg Glu Leu Gly His Ile Thr Leu Arg Phe Asp Gly Gln Pro
Gln Ala Glu Tyr Pro Gly Thr Val His Val Glu Gly Pro Val Pro Gln
                                105
Ala Val Thr Pro Gly Cys Thr Leu Lys Phe Ile Ser
                            120
<210> 9689
<211> 124
<212> PRT
<213> Enterobacter cloacae
<400> 9689
Gln Gly Ala Asp Met Val Thr Ala Leu Ile Thr Val Ala Ala Leu Ala
                                    10
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Trp Ile Cys Gln Met Ala Phe Gly Gly Trp Gln Ile Tyr Gln Phe Asn 20 25 30

Arg Ala Phe Asp Ala Leu Cys Gln Lys Gly Arg Val Gly Val Gly Arg 40 Ser Gly Gly Arg Phe Lys Pro Arg Val Val Ala Val Ala Leu Asp 55 60 Glu His Asn Arg Val Ser Asp Ser Leu Ile Met Arg Gly Val Thr Val 70 75 Phe Ala Arq Pro Thr Lys Ile Gln Ala Ile Asn Gly Ile Ser Leu His 85 90 Glu Leu Gln Pro Asp Val Ile Phe Pro His Asp Ser Leu Cys Gln Asn 105 Ala Leu Ser Leu Ala Leu Asn Leu Lys His Gly <210> 9690 <211> 279 <212> PRT <213> Enterobacter cloacae <400> 9690 Phe Arg Cys Glu Ser Tyr Lys Leu Ala Glu Leu Ser Phe Arg Asn Val Arg Asn Glu Ala Pro Met Lys Pro Arg Gln Arg Gln Ala Ala Ile Leu 20 Glu His Leu Gln Lys Gln Gly Lys Cys Ser Val Glu Asp Leu Ala His 40 Tyr Phe Asp Thr Thr Gly Thr Thr Ile Arg Lys Asp Leu Val Leu Leu 55 Glu Asn Ser Gly Ala Val Ile Arg Thr Tyr Gly Gly Val Val Leu Asn 75 70 Lys Asp Glu Ala Asp Pro Pro Ile Asp His Lys Thr Leu Ile Asn Thr 85 90 His Gln Lys Ala Leu Ile Ala Glu Ala Ala Val Lys Phe Ile His Asp 100 105 Gly Asp Ser Ile Ile Leu Asp Ala Gly Ser Thr Val Leu Gln Met Ile 120 Pro Leu Leu Ser Arg Phe Asn Asn Ile Thr Val Met Thr Asn Ser Leu 135 His Ile Val Asn Ala Leu Ser Glu Phe Asp Ser Glu Gln Thr Ile Leu 155 Met Pro Gly Gly Thr Phe Arg Lys Lys Ser Ala Ser Phe His Gly Gln 170 Leu Ala Glu Asn Ala Phe Asp His Phe Ser Phe Asp Lys Leu Phe Met 185 Gly Thr Asp Gly Ile Asp Leu Asn Ala Gly Val Thr Thr Phe Asn Glu 195 200 Val Phe Ser Val Ser Lys Ala Met Cys Asn Ala Ala Arg Glu Val Phe 215 220 Leu Met Ala Asp Ser Ser Lys Phe Gly Arg Lys Ser Pro Asn Ile Val 230 235 Cys Ser Leu Glu Ser Val Asp Lys Leu Ile Thr Asp Ala Gly Ile Asp 250 245 Pro Ala Phe Lys Lys Ala Leu Glu Ala Lys Gly Ile Asp Val Ile Val 260 265 Thr Gly Glu Lys Asn Glu 275 <210> 9691

<sup>&</sup>lt;211> 384

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
<400> 9691
Thr Gly Asn Gly Gly Lys Met Ser His Gly Ile Val Ile Ile Gly Ser
                                    10
Gly Phe Ala Ala Arg Gln Leu Val Lys Asn Ile Arg Lys Gln Asp Ala
            20
                                25
Asn Val Pro Leu Thr Val Ile Ala Ala Asp Ser Met Asp Glu Tyr Asn
                            40
                                                 45
Lys Pro Asp Leu Ser His Val Ile Ser Gln Asn Gln Arg Ala Asp Asp
                        55
Leu Thr Arg Gln Thr Ala Gly Glu Phe Ala Glu Gln Phe Asn Leu Arg
                                        75
                    70
Leu Phe Pro Tyr Thr Trp Val Thr Asp Ile Asp Ala Asp Ala His Val
                85
                                    90
Val Asn Ala Lys Asp Lys Thr Trp His Tyr Asp Lys Leu Val Leu Ala
            100
                                105
Thr Gly Ala Ser Ala Phe Val Pro Pro Val Glu Gly Arg Glu Leu Met
                            120
                                                 125
        115
Val Thr Leu Asn Ser Gln Gln Glu Tyr Gln Ala Ser Glu Thr Leu Leu
                        135
                                            140
Arg Asp Ala Thr Arg Val Met Ile Val Gly Gly Leu Ile Gly Thr
                    150
                                        155
Glu Leu Ala Met Asp Phe Cys Arg Ala Gly Lys Ser Val Thr Leu Val
                                    170
                165
Asp His Ala Ala Ser Ile Leu Ser Ala Leu Met Pro Ala Glu Val Ser
                                                     190
            180
                                185
Ser Arg Leu Gln His Arg Leu Thr Asp Met Gly Val His Leu Leu Leu
        195
                            200
Lys Ser Gln Leu Gln Ser Leu Ser Lys Thr Glu Thr Gly Ile Cys Ala
                        215
                                            220
Thr Leu Asp Arg Asn Arg Ser Val Glu Val Asp Val Ile Ala Ala
                                        235
                    230
Thr Gly Leu Arg Pro Glu Thr Ala Leu Ala His Arg Ala Gly Ala Glu
                                    250
Ile Asn Arg Gly Val Lys Val Asp Ser Tyr Leu Gln Thr Thr Gln Pro
            260
                                265
Asp Ile Tyr Ala Leu Gly Asp Cys Ala Glu Ile Asn Gly Gln Val Leu
                            280
                                                 285
Pro Phe Leu Gln Pro Ile Gln Leu Ser Ala Met Phe Leu Ala Lys Asn
                        295
Leu Leu Gly Gly Asn Ala Pro Val Lys Leu Pro Ala Met Leu Val Lys
Val Lys Thr Pro Glu Leu Pro Leu His Leu Ala Gly Glu Thr Gln Arg
                                    330
Gln Asp Leu Asp Trp Gln Ile Ala Leu Ser Pro Gln Gly Met Val Ala
                                345
Arg Gly Thr Asp Thr Ala Gly Gln Met Arg Ala Phe Val Val Ser Glu
                            360
Asp Arg Met Lys Glu Ala Phe Ala Leu Leu Lys Ser Leu Pro Ala
                        375
<210> 9692
<211> 114
<212> PRT
<213> Enterobacter cloacae
```

<400> 9692

His Pro Arg Arg Arg Ala Ala Ser Arg Ser Pro Pro Asp Thr Leu Pro 1 5 10 15

His Ala His Asp Asp Ala Ala Arg Ser Gln Arg Ala Ala Leu Ala Ser 20 25 30

Gly Pro Thr Val Gly Arg Asp Ile Pro Asp Gly His Arg Thr Pro His

40 Ala Leu Ala Gly Lys Arg Arg Ser Pro Ala Ser Ser Arg Ala His Cys Ala Thr Ala Pro Leu Arg Pro Arg Ser Asp Arg Gln Asn Ala Gly Ser Ala Pro Pro Gly Cys His Val Pro Gly Arg Arg Tyr Phe Ser Ser 85 Pro Arg Arg Cys Ile Thr Trp Ala Gly Cys Arg Gly Ile Arg Arg Ala 105

Met

<210> 9693 <211> 338 <212> PRT

<213> Enterobacter cloacae

<400> 9693

Ser Met Asn Thr Val Glu Met Ala His Gly Ser Gly Gln Ala Met Gln Gln Leu Ile Asn Arg Leu Phe Met Asp Ala Phe Asp Asn Pro Trp Leu Ala Glu Gln Glu Asp Gln Ala Arg Ile Ala Leu Ser Thr Leu Thr Ala His Gly Asp Arg Leu Ala Phe Ser Thr Asp Ser Tyr Val Ile Asp Pro Leu Phe Pro Gly Gly Asp Ile Gly Lys Leu Ala Val Cys Gly 75 Thr Ala Asn Asp Val Ala Val Ser Gly Ala Ile Pro Arg Tyr Leu Ser 90 Cys Gly Phe Ile Leu Glu Glu Gly Leu Pro Met Glu Thr Leu Thr Ala 100 105 110 Val Val Asn Ser Met Ala His Thr Ala Arg Glu Ala Gly Ile Ala Ile 120 Val Thr Gly Asp Thr Lys Val Val Gln Arg Gly Ala Ala Asp Lys Leu 135 140 Phe Ile Asn Thr Ala Gly Met Gly Ala Ile Pro Ala Asp Ile His Trp 150 155 Gly Ala Gln Gln Leu Cys Ala Gly Asp Val Leu Ile Val Ser Gly Thr 170 165 Leu Gly Cys His Gly Ala Thr Ile Leu Asn Leu Arg Glu Gly Leu Arg 180 185 Leu Asp Gly Glu Leu Arg Ser Asp Cys Ala Val Leu Thr Pro Leu Ile 200 Gln Thr Leu Arg Asp Met Pro Gly Val Lys Ala Leu Arg Asp Ala Thr 215 220 Arg Gly Gly Val Asn Ala Val Val His Glu Phe Ala Ala Ser Ser Gly 230 235 Cys Gly Ile Glu Leu Thr Glu Arg Gly Leu Pro Val Lys Gly Ala Val 245 250 Arg Gly Leu Cys Glu Leu Leu Gly Leu Asp Pro Leu Asn Phe Ala Asn 265 Glu Gly Lys Leu Val Ile Gly Val Glu Arg Thr Ala Ala Glu Ala Val 280 Leu Ala Gln Leu Arg Ala His Pro Leu Gly Lys Asp Ala Ala Ile Ile 295 300 Gly Asp Val Val Glu Arg Lys Gly Val Arg Leu Thr Gly Leu Tyr Gly 310 315 Val Lys Arg Thr Leu Asp Leu Pro His Ala Glu Pro Leu Pro Arg Ile 325 330 Cys

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<210> 9694
<211> 255
<212> PRT
<213> Enterobacter cloacae
<400> 9694
Val Met Ser Ile Cys Ala Glu Lys Ile Thr Trp Lys Val Gly Lys Lys
                                    10
Ile Ile Val Asn His Val Ser Leu Lys Val Ser Arg Gly Glu Thr Val
                                25
Gly Leu Leu Gly Pro Asn Gly Cys Gly Lys Ser Ser Leu Leu Arg Ile
Leu Ala Gly Leu Arg Arg Pro Asp Ala Gly Cys Val Thr Leu Asp Gly
Gln Asp Ile Ala Arg Ile Ala Lys Lys Gln Leu Ala Arg Arg Val Ala
Phe Val Glu Gln His Gly Met Thr Asp Ala Asn Met Arg Val Arg Asp
                                    90
Val Val Lys Leu Gly Arg Ile Pro His His Ser Pro Phe Ser Asn Trp
            100
                                105
Ser Ala Gln Asp Asp Glu Thr Val Thr Ala Ala Leu Gln Arg Val Asp
                            120
Met Leu Asp Arg Ser Glu Gln Gly Trp Leu Ser Leu Ser Gly Gly Glu
                        135
Arg Gln Arg Val His Ile Ala Arg Ala Leu Ala Gln Thr Pro Thr Glu
                    150
Ile Leu Leu Asp Glu Pro Thr Asn His Leu Asp Ile His His Gln Met
                                    170
Gln Leu Met Gln Leu Ile Ser Glu Leu Pro Val Thr Ser Ile Val Ala
                                185
Ile His Asp Leu Asn His Ala Ser Met Phe Cys Asp Ser Leu Ile Val
                            200
Met Gln Gln Gly Gln Ile'Val Ala Thr Gly Thr Pro Gln Glu Ile Leu
                        215
                                            220
Ser Glu Glu Leu Trp Asp Val Phe Arg Val Lys Thr Arg Ile Glu
                    230
                                        235
Ile Ser Pro Tyr His Gly Lys Lys His Ile His Phe Ile Val
                245
                                    250
<210> 9695
<211> 410
<212> PRT
<213> Enterobacter cloacae
<400> 9695
Val Lys Thr Met Pro Leu Arg Thr Ala Thr Thr Leu Trp Pro Pro Val
                                    10
Leu Leu Gly Ser Gln Phe Val Phe Asn Ile Gly Phe Tyr Ala Val Val
                                25
Pro Phe Leu Ala Ile Phe Leu Arg Asp Met Leu Leu Ser Gly Gly
                            40
Leu Ile Gly Leu Val Leu Gly Leu Arg Thr Phe Ser Gln Gln Gly Met
                        55
Phe Ile Val Gly Gly Ala Leu Ser Asp Arg Phe Gly Ala Lys Ser Val
                    70
Ile Leu Ser Gly Cys Ile Val Arg Val Val Gly Tyr Leu Leu Ala
               85
                                    90
Phe Gly Gln Ser Leu Trp Pro Val Ile Leu Gly Ala Cys Leu Thr Gly
```

```
Val Gly Gly Ala Leu Phe Ser Pro Ser Ile Glu Ala Leu Leu Ala Lys
                            120
        115
Ala Gly Thr Gln Ser Glu Ala Lys Gly Lys Arg Ser Arg Ala Glu Trp
                        135
                                            140
Phe Ala Leu Phe Ala Val Cys Gly Glu Leu Gly Ala Val Leu Gly Pro
                    150
                                        155
Val Met Gly Ala Leu Leu Thr Gly Leu Gly Phe Arg Gln Val Ala Leu
                165
                                    170
Ala Gly Ala Gly Ile Phe Ile Val Ala Leu Val Val Leu Phe Phe Cys
            180
                                185
Leu Pro Ala Ala His Arg Ser Thr Lys Pro Leu Lys Ile Leu Pro Trp
                            200
Trp Thr Thr Phe Arg Gln Pro Arg Phe Val Ala Phe Ile Ile Ala Tyr
                        215
Ser Ser Trp Leu Leu Ser Tyr Asn Gln Leu Tyr Leu Ala Leu Pro Val
                    230
                                        235
Glu Ile Gln Arg Ala Gly Gly Asn Glu Lys Asp Leu Gly Pro Leu Phe
                245
                                    250
Met Leu Ala Ser Val Leu Ile Ile Val Leu Gln Leu Pro Leu Ala Arg
            260
                                265
                                                    270
Phe Ala Arg Asn Val Gly Ala Val Arg Ile Leu Pro Val Gly Phe Leu
                            280
Leu Leu Ser Ala Ser Phe Ala Ser Val Ala Leu Phe Ala Ala Thr Glu
                        295
                                            300
Pro Pro Glu Gly Trp Leu Arg Leu Leu Pro Ser Ala Ser Leu Val Thr
                    310
                                        315
Leu Leu Thr Leu Gly Gln Met Leu Leu Val Pro Ser Ala Lys Asp Leu
                325
                                    330
Ile Pro Arg Phe Ala Glu Glu Ser Thr Leu Gly Ala His Tyr Gly Ala
            340
                                345
                                                    350
Leu Ser Thr Ala Gly Gly Ile Ala Val Leu Val Gly Asn Leu Gly Leu
                            360
                                                365
Gly Ser Leu Leu Asp Lys Ala Leu Val Pro Ser Thr Glu Ala Ile Tyr
                                            380
                        375
Pro Trp Leu Leu Ala Val Phe Pro Leu Cys Ser Ala Val Ala Leu
                   390
                                        395
Ser Val Ile Cys Arg Pro Leu Arg Arg
                405
```

<210> 9696

<211> 861

<212> PRT

<213> Enterobacter cloacae

<400> 9696

Glu His Gly His Gln Asp Phe Met Ser Thr Leu Glu Asn Phe Asp Ala His Thr Pro Met Met Gln Gln Tyr Leu Lys Leu Lys Ala Gln His Pro Glu Ile Leu Leu Phe Tyr Arg Met Gly Asp Phe Tyr Glu Leu Phe Tyr 40 Asp Asp Ala Lys Arg Ala Ser Gln Leu Leu Asp Ile Ser Leu Thr Lys Arg Gly Ala Ser Ala Gly Glu Pro Ile Pro Met Ala Gly Ile Pro His 75 His Ala Val Glu Asn Tyr Leu Ala Lys Leu Val Asn Gln Gly Glu Ser 90 Val Ala Ile Cys Glu Gln Ile Gly Asp Pro Ala Thr Ser Lys Gly Pro 100 105 110 Val Glu Arg Lys Val Val Arg Ile Val Thr Pro Gly Thr Ile Ser Asp 120 125

Glu Ala Leu Leu Gln Glu Arg Gln Asp Asn Leu Leu Ala Ala Ile Trp 135 Gln Asp Gly Lys Gly Phe Gly Tyr Ala Thr Leu Asp Ile Ser Ser Gly 150 155 Arg Phe Arg Leu Ser Glu Pro Ala Asp Arg Glu Thr Met Ala Ala Glu 165 170 Leu Gln Arg Thr Asn Pro Ala Glu Leu Leu Tyr Ala Glu Asp Phe Ala 185 180 Glu Met Ala Leu Ile Glu Gly Arg Arg Gly Leu Arg Arg Pro Leu 200 Trp Glu Phe Glu Ile Asp Thr Ala Arg Gln Gln Leu Asn Leu Gln Phe 215 220 Gly Thr Arg Asp Leu Ile Gly Phe Gly Val Glu Asn Ala Pro Arg Gly 230 235 Leu Cys Ala Ala Gly Cys Leu Leu Gln Tyr Val Lys Asp Thr Gln Arg 245 250 Thr Ala Leu Pro His Ile Arg Ser Ile Thr Met Glu Arg Gln Gln Asp 265 Ser Ile Ile Met Asp Ala Ala Thr Arg Arg Asn Leu Glu Ile Thr Gln 280 Asn Leu Ala Gly Gly Met Glu Asn Thr Leu Ala Ser Val Leu Asp Ser 295 Thr Val Thr Pro Met Gly Ser Arg Met Leu Lys Arg Trp Leu His Met 310 315 Pro Ile Arg Asn Thr Glu Thr Leu Thr Gly Arg Gln Gln Thr Ile Ala 330 Ala Leu Gln Asp Arg Tyr Thr Glu Leu Gln Pro Val Leu Arg Gln Val 345 Gly Asp Leu Glu Arg Ile Leu Ala Arg Leu Ala Leu Arg Thr Ala Arg Pro Arg Asp Leu Ala Arg Met Arg His Ala Phe Gln Gln Leu Pro Glu 375 Leu Arg Ala Gln Leu Gly Glu Ile Asp Ser Ala Pro Val Gln Lys Leu 390 395 Arg Glu Thr Met Gly Glu Phe Thr Glu Leu Arg Glu Leu Leu Glu Arg 405 410 Ala Ile Ile Asp Ala Pro Pro Val Leu Val Arg Asp Gly Gly Val Ile 420 425 Ala Pro Gly Tyr Asn Glu Glu Leu Asp Glu Trp Arg Ala Leu Ala Asp 435 440 Gly Ala Thr Asp Tyr Leu Asp Lys Leu Glu Ile Arg Glu Arg Glu Arg 455 460 Leu Gly Leu Asp Thr Leu Lys Val Gly Tyr Asn Ala Val His Gly Tyr 470 475 Tyr Ile Gln Ile Ser Arg Gly Gln Ser His Leu Ala Pro Ile His Tyr 485 490 Val Arg Arg Gln Thr Leu Lys Asn Ala Glu Arg Tyr Ile Ile Pro Glu 500 505 Leu Lys Glu Tyr Glu Asp Lys Val Leu Thr Ser Lys Gly Lys Ala Leu 520 525 Ala Leu Glu Lys Gln Leu Tyr Asp Glu Leu Phe Asp Ile Leu Met Pro 535 540 His Leu Ala Asp Leu Gln Leu Ser Ala Ala Ala Leu Ala Glu Leu Asp 555 Val Leu Val Asn Leu Ala Glu Arg Ala Asp Thr Leu Asn Tyr Thr Cys 570 Pro Thr Phe Thr Asp Lys Pro Gly Ile Arg Ile Thr Glu Gly Arg His 585 Pro Val Val Glu Gln Val Leu Asn Glu Pro Phe Ile Ala Asn Pro Leu 600 Asn Leu Ser Pro Gln Arg Arg Met Leu Ile Ile Thr Gly Pro Asn Met

```
610
                        615
                                            620
Gly Gly Lys Ser Thr Tyr Met Arg Gln Thr Ala Leu Ile Ala Leu Leu
                    630
                                         635
Ala Tyr Ile Gly Ser Tyr Val Pro Ala Gln Lys Val Glu Ile Gly Pro
                645
                                    650
Ile Asp Arg Ile Phe Thr Arg Val Gly Ala Ala Asp Asp Leu Ala Ser
                                665
Gly Arg Ser Thr Phe Met Val Glu Met Thr Glu Thr Ala Asn Ile Leu
                            680
His Asn Ala Thr Glu Asn Ser Leu Val Leu Met Asp Glu Val Gly Arg
                        695
Gly Thr Ser Thr Tyr Asp Gly Leu Ser Leu Ala Trp Ala Cys Ala Glu
                    710
                                        715
Ser Leu Ala Asn Lys Ile Lys Ala Leu Thr Leu Phe Ala Thr His Tyr
                725
                                    730
Phe Glu Leu Thr Gln Leu Pro Glu Lys Met Glu Gly Val Ala Asn Val
                                745
            740
His Leu Asp Ala Leu Glu His Gly Asp Thr Ile Ala Phe Met His Thr
                            760
Val Gln Asp Gly Ala Ala Ser Lys Ser Tyr Gly Leu Ala Val Ala Ala
                        775
                                            780
Leu Ala Gly Val Pro Lys Glu Val Ile Lys Arg Ala Arg Gln Lys Leu
                    790
                                        795
Arg Glu Leu Glu Ser Leu Ser Pro Asn Ala Ala Ala Thr Gln Ile Asp
                805
                                    810
Gly Thr Gln Met Ser Leu Leu Ala Val Pro Glu Glu Thr Ser Pro Ala
            820
                                825
                                                    830
Val Glu Ala Leu Glu Asn Leu Asp Pro Asp Ser Leu Thr Pro Arg Gln
                            840
Ala Leu Glu Trp Ile Tyr Arg Leu Lys Ser Leu Val
                        855
<210> 9697
<211> 88
<212> PRT
<213> Enterobacter cloacae
<400> 9697
Phe Ser Ala Val Phe Cys Arg Val Ala Ala Ser Pro Tyr Pro Ala Tyr
Lys Thr Arg Arg Thr Gly Lys Arg Ser Ala Thr Gly Leu Phe Leu Gln
                                25
Gln Arg Arg Asp Arg His Leu Arg Cys Phe Ile Asn Ile Leu Leu
Arg His Ala Glu Arg Phe Arg Val Met Leu Ala Ala Gly Thr Ala Gln
Arg Phe Gly Ile Ala Pro Gly Ile Gln Thr Val Leu Thr Leu Ile Tyr
                    70
Arg Pro Asp Thr Phe His Arg
                85
<210> 9698
<211> 198
<212> PRT
<213> Enterobacter cloacae
<400> 9698
Thr Lys Thr Asn Ala Leu Gln Glu Arg Arg Met Ile Glu Thr Ile Thr
```

10

His Gly Ala Glu Trp Phe Ile Gly Leu Phe Gln Lys Gly Gly Glu Val

25

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5262
Phe Thr Gly Met Val Thr Gly Ile Leu Pro Leu Leu Ile Ser Leu Leu
                            40
Val Ile Met Asn Ala Leu Ile Asn Phe Ile Gly Gln Gln Arg Ile Glu
                       55
Arg Phe Ala Gln Arg Cys Ala Gly Asn Pro Leu Ser Arg Tyr Leu Ile
                   70
                                       75
Leu Pro Phe Ile Gly Thr Phe Val Phe Cys Asn Pro Met Thr Leu Ser
               85
                                   90
Leu Gly Arg Phe Met Pro Glu Lys Tyr Lys Pro Ser Tyr Tyr Ala Ala
                               105
                                                   110
Ala Ser Tyr Ser Cys His Ser Met Asn Gly Leu Phe Pro His Ile Asn
                            120
Pro Gly Glu Leu Phe Val Tyr Leu Gly Ile Ala Ser Gly Leu Thr Thr
                       135
Leu Gly Leu Pro Leu Gly Pro Leu Ala Val Ser Tyr Leu Leu Val Gly
                   150
                                        155
Leu Val Thr Asn Phe Phe Arg Gly Trp Val Thr Asp Leu Thr Thr Ala
                                   170
               165
Ile Phe Glu Lys Lys Met Gly Ile Gln Leu Glu Gln Lys Val His Leu
                               185
           180
Ser Gly Ala Thr Ala
       195
<210> 9699
<211> 326
<212> PRT
<213> Enterobacter cloacae
<400> 9699
Pro Glu Arg Lys Met Ser Asp Phe Leu Leu Asn Ala Gly Arg Gln Thr
   . 5
                                   10
Leu Leu Glu Leu Gln Glu Ala Ser Arg Leu Pro Glu Arg Leu Gly
                                25
Glu Asp Phe Val Arg Ala Ala Asn Thr Ile Ile His Cys Glu Gly Lys
                           40
Val Ile Val Ala Gly Ile Gly Lys Ser Gly His Ile Gly Lys Lys Ile
                       55
Ala Ala Thr Leu Ala Ser Thr Gly Thr Pro Ala Phe Phe Val His Pro
                   70
                                       75
Ala Glu Ala Leu His Gly Asp Leu Gly Met Ile Glu Ser Arg Asp Val
                                   90
               85
Met Leu Phe Ile Ser Tyr Ser Gly Ser Ala Lys Glu Leu Asp Leu Ile
                              105
Ile Pro Arg Leu Gln Glu Lys Ser Val Ala Leu Leu Ala Met Thr Gly
                           120
                                               125
Lys Ser Arg Ser Pro Leu Ala Leu Ala Ala Lys Ala Thr Leu Asp Ile
                       135
                                           140
Ser Val Glu Arg Glu Ala Cys Pro Met His Leu Ala Pro Thr Ser Ser
                                       155
Thr Val Asn Thr Leu Met Met Gly Asp Ala Leu Ala Met Ala Val Met
                                   170
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Gln Ala Arg Gly Phe Asn Glu Glu Asp Phe Ala Arg Ser His Pro Ala
180
185
190
Gly Ala Leu Gly Ala Arg Leu Leu Asn Lys Val His His Leu Met Arg
195
200
205
Thr Asp Asp Ala Ile Pro Gln Val Lys Leu Asp Thr Ser Val Met Asp

Ala Met Leu Glu Leu Ser Arg Thr Gly Leu Gly Leu Val Ala Val Cys

Asp Asn Asp Arg Gln Val Lys Gly Val Phe Thr Asp Gly Asp Leu Arg

235

250

215

 Arg
 Trp
 Leu
 Val
 Gly
 Gly
 Gly
 Leu
 Glu
 Ala
 Arg
 Val
 Ser
 Glu
 Ala

 Met
 Thr
 Gln
 Gly
 Gly
 Leu
 Thr
 Leu
 Asn
 Ala
 Asp
 Ser
 Arg
 Ala
 Ile
 Glu
 Ile
 Glu
 Ile
 Ile
 Thr
 Ala
 Ala
 Ala
 Pro
 Val
 Val

 Asp
 Glu
 His
 Gly
 Arg
 Leu
 Cys
 Gly
 Ala
 Ile
 Asn
 Leu
 Gln
 Asp
 Phe
 Tyr

 305
 310
 315
 320

<210> 9700 <211> 487

<212> PRT

<213> Enterobacter cloacae

<400> 9700 . . Val Glu Val Ala Met Ser Ile Leu Val Lys Asn Asn Ile His Trp Val 10 Gly Gln Arg Asp Trp Glu Val Arg Asp Phe His Gly Thr Glu Tyr Lys 20 25 Thr Leu Arg Gly Ser Ser Tyr Asn Ser Tyr Leu Ile Arg Glu Gly Lys 40 4.5 Asn Val Leu Ile Asp Thr Val Asp His Lys Phe Ser Arg Glu Phe Val 55 Gln Asn Leu Arg Ser Glu Ile Asp Leu Asn Glu Ile Asp Tyr Ile Ile 70 75 Ile Asn His Ala Glu Glu Asp His Ala Gly Ala Leu Thr Glu Leu Met 85 90 Ser His Ile Pro Asp Thr Pro Ile Tyr Cys Thr Thr Asn Ala Ile Asp 100 105 Ser Ile Asn Gly His His His Pro Glu Trp Asn Phe His Thr Val 120 125 Lys Thr Gly Asp Thr Leu Asp Ile Gly Asn Gly Lys Gln Leu Ile Phe 135 140 Val Glu Thr Pro Met Leu His Trp Pro Asp Ser Met Met Thr Tyr Met 150 155 Thr Gly Asp Ala Val Leu Phe Ser Asn Asp Ala Phe Gly Gln His Tyr 165 170 Cys Asp Glu Arg Leu Phe Asn Asp Glu Val Asp Gln Thr Glu Leu Phe 185 Glu Gln Cys Gln Arg Tyr Tyr Ala Asn Ile Leu Thr Pro Phe Ser Arg 200 Leu Val Thr Pro Lys Ile Thr Glu Ile Leu Gly Phe Asn Leu Pro Val 215 Asp Met Ile Ala Thr Ser His Gly Val Val Trp Arg Glu Asn Pro Thr 235 Gln Ile Val Glu Leu Tyr Leu Lys Trp Ala Ala Asp Tyr Gln Glu Asp 245 250 Arg Ile Thr Ile Phe Tyr Asp Thr Met Ser Asn Asn Thr Arg Met Met 260 265 Ala Asp Ala Ile Ala Gln Gly Ile Asn Glu Val Asp Pro Asn Val Ala 275 280 285 Val Lys Ile Phe Asn Val Ala Arg Ser Asp Lys Asn Glu Val Leu Thr 295 300 Asn Val Phe Arg Ser Lys Gly Val Leu Val Gly Thr Ser Thr Met Asn 310 315 Asn Val Met Met Pro Lys Ile Ala Gly Leu Val Glu Glu Met Thr Gly 325 330 Leu Arg Phe Arg Asn Lys Arg Ala Ser Ala Phe Gly Ser His Gly Trp 340 345

Ser Gly Gly Ala Val Asp Arg Leu Ser Thr Arg Leu Gln Asp Ala Gly 355 360 Phe Glu Met Ser Leu Ser Leu Lys Ala Lys Trp Arg Pro Asp Leu Asp 370 375 380 Ala Leu Glu Ile Cys Arg Gln His Gly Arg Asp Ile Ala Arg Gln Trp 390 395 Ala Leu Ala Pro Leu Pro Glu Thr Ala Pro Ala Ala Ala Val Ala Pro 405 410 Glu Ala Val Ala Glu Ala Ala Pro Ala Ala Ala Asp Leu Gly Pro Cys 425 Met Gln Cys Ser Val Cys Gln Trp Ile Tyr Asp Pro Glu Leu Gly Glu 435 440 Pro Leu Gln Asp Val Ala Pro Gly Thr Pro Trp Ser Glu Val Pro Asp 455 Asn Phe Leu Cys Pro Glu Cys Ser Leu Gly Lys Asp Val Phe Asp Glu 470 475 Leu Ala Thr Glu Ala Lys

<210> 9701 <211> 499

<212> PRT

<400> 9701

<213> Enterobacter cloacae

Asn Arg Phe Pro Thr Leu Leu Thr Thr Ile Thr Gly Ser His Pro Met 10 Ala Lys Asn Tyr Ala Ala Leu Ala Asn Asp Val Val Ser Ala Leu Gly 20 25 Gly Lys Glu Asn Ile Val Ala Val Thr His Cys Met Thr Arg Leu Arg 40 45 Phe Val Leu Lys Asp Glu Ser Leu Thr Asp Thr Ala Arg Leu Lys Ser 55 Ile Ser Gly Val Leu Gly Val Val Arg Asn Asp Asn Gln Cys Gln Val 70 75 Ile Ile Gly Asn Thr Val Ser Gln Ala Tyr Arg Glu Val Val Ser Leu 85 90 Leu Pro Ala Asn Leu Gln Pro Ala Val Ala Glu Gly Pro Gln Lys Leu 105 Thr Leu Arg Arg Ile Gly Ala Gly Ile Leu Asp Ala Leu Ile Gly Thr 120 Met Ser Pro Leu Ile Pro Ala Ile Ile Gly Glu Ser Met Val Lys Leu 135 Leu Ala Met Ile Leu Glu Met Thr Gly Val Leu Gly Lys Gly Asp Pro 150 Thr Leu Thr Ile Leu Thr Val Ile Gly Asp Gly Ala Phe Phe Leu 165 170 Pro Leu Met Val Ala Ala Ser Ala Ala Val Lys Phe Lys Thr Asn Met 180 185 Ser Leu Ala Ile Ala Ile Ala Gly Val Leu Val His Pro Ser Phe Ile 200 205 Glu Leu Met Ala Lys Ala Ala Gln Gly Glu His Val Glu Phe Ala Phe 220 215 Ile Pro Val Thr Ala Val Lys Tyr Thr Tyr Thr Val Ile Pro Ala Leu 230 235

Val Met Thr Trp Cys Leu Ser Tyr Ile Glu Arg Trp Val Asp Arg Ile

Thr Pro Ala Val Thr Lys Asn Phe Leu Lys Pro Met Leu Ile Val Leu

265 Ile Ala Ala Pro Leu Ala Ile Val Leu Ile Gly Pro Leu Gly Ile Trp 280

250

285

245

Ile Gly Ser Ala Ile Ser Ala Leu Val Tyr Thr Ile His Gly Tyr Leu 295 300 Gly Trp Leu Ser Val Ala Ile Met Gly Ala Leu Trp Pro Leu Leu Val 310 315 Met Thr Gly Met His Arg Val Phe Thr Pro Thr Ile Ile Gln Thr Ile 325 330 Ala Glu Thr Gly Lys Glu Gly Met Val Met Pro Ser Glu Ile Gly Ala 340 345 Asn Leu Ser Leu Gly Gly Ser Ser Leu Ala Val Ala Trp Lys Thr Lys 360 365 Asn Pro Glu Leu Arg Gln Thr Ala Leu Ala Ala Ala Ala Ser Ala Ile 375 Met Ala Gly Ile Ser Glu Pro Ala Leu Tyr Gly Val Ala Val Arg Leu 395 390 Lys Arg Pro Leu Ile Ala Ser Leu Ile Ser Gly Phe Ile Cys Gly Ala 405 410 Val Ala Gly Met Ala Gly Leu Ala Ser His Ser Met Ala Ala Pro Gly 420 425 Leu Phe Thr Ser Val Gln Phe Phe Asp Pro Ala Asn Pro Met Thr Ile 440 435 445 Val Trp Val Phe Gly Val Met Gly Leu Ala Val Leu Ser Phe Val 455 460 Leu Thr Leu Leu Gly Phe Glu Asp Ile Pro Val Glu Asp Glu Ala 470 475 Glu Lys Ala Arg Ala Leu Gln Thr Ala Pro Val Gln Asn Lys Ala Ala 485 490 Glu Ala

<210> 9702 <211> 481 <212> PRT

<213> Enterobacter cloacae

<400> 9702

Thr Glu Ser Glu Val Arg Met Ser Val Phe Pro Gln Gly Phe Leu Trp 1.0 Gly Gly Ala Leu Ala Ala Asn Gln Ser Glu Gly Ala Tyr Arg Glu Gly 25 Gly Lys Gly Leu Thr Thr Val Asp Met Ile Pro His Gly Ala Asn Arg 40 Leu Ala Val Lys Val Gly Lys Glu Lys Arg Phe Ser Leu Arg Asp Asp 55 Glu Phe Tyr Pro Ser His Glu Ala Ile Asp Phe Tyr His Arg Tyr Lys Glu Asp Ile Ala Leu Met Ala Glu Met Gly Phe Thr Val Phe Arg Thr 90 Ser Ile Ala Trp Ser Arg Leu Tyr Pro Asn Gly Asp Glu Pro Leu Pro 105 Asn Gln Glu Gly Ile Ala Phe Tyr Arg Ala Val Phe Glu Glu Cys Lys 120 Lys Tyr Asn Ile Glu Pro Leu Val Thr Leu Cys His Phe Asp Val Pro 135 140 Met His Leu Val Thr Glu Tyr Gly Ser Trp Arg Asn Arg Lys Met Val 150 155 Asp Phe Phe Ala Arg Tyr Ala Arg Thr Cys Phe Glu Ala Phe Asn Gly 165 170 175 165 Leu Val Lys Tyr Trp Leu Thr Phe Asn Glu Ile Asn Ile Met Leu His 185 190 180 Ser Pro Phe Ser Gly Ala Gly Leu Val Phe Glu Glu Gly Glu Asn Glu 200

```
Asp Gln Val Lys Tyr Gln Ala Ala His His Glu Leu Val Ala Ser Ala
                        215
                                            220
Leu Ala Thr Lys Ile Ala His Glu Val Asn Pro Glu Asn Gln Val Gly
                    230
                                        235
Cys Met Leu Ala Gly Gly Asn Phe Tyr Pro Tyr Ser Cys Lys Pro Glu
                                    250
                245
Asp Val Trp Met Ala Leu Glu Lys Asp Arg Glu Asn Leu Phe Phe Ile
                                265
            260
Asp Val Gln Ala Arg Gly Ser Tyr Pro Ala Tyr Ser Ala Arg Val Phe
                            280
Arg Glu Lys Gly Val Val Ile Val Lys Asp Pro Gly Asp Asp Glu Leu
                        295
                                            300
Leu Lys Asn Thr Val Asp Phe Val Ser Phe Ser Tyr Tyr Ala Ser Arg
                    310
                                        315
Cys Ala Ser Ala Asp Met Asn Ala Gly Asn Thr Ser Ala Ala Asn Ile
                325
                                    330
Val Lys Ser Leu Arg Asn Pro His Ile Gln Val Ser Glu Trp Gly Trp
                                345
Gly Ile Asp Pro Leu Gly Leu Arg Ile Thr Met Asn Met Met Tyr Asp
                            360
Arg Tyr Gln Lys Pro Leu Phe Leu Val Glu Asn Gly Leu Gly Ala Lys
    370
                        375
Asp Val Val Asp Glu Asn Gly Glu Ile Asn Asp Asp Tyr Arg Ile Ser
                    390
                                        395
Tyr Leu Arg Glu His Ile Arg Ala Met Gly Asp Ala Ile Glu Asp Gly
                405
                                    410
Val Pro Leu Gly Tyr Thr Trp Gly Cys Ile Asp Leu Val Ser
                                425
            420
Ala Ser Thr Gly Glu Met Ser Lys Arg Tyr Gly Phe Val Tyr Val Asp
                            440
Arg Asp Asp Ala Gly Asn Gly Thr Leu Glu Arg Lys Arg Lys Lys Ser
                        455
                                            460
Phe Gly Trp Tyr Lys Lys Val Ile Ala Ser Asn Gly Gly Asp Leu Glu
                    470
```

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<210> 9703
<211> 81
<212> PRT
<213> Enterobacter cloacae
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<400> 9703

 Ser
 Ser
 Pro
 Gln
 Ser
 Ala
 Thr
 Pro
 Arg
 Pro
 Thr
 Thr
 Ala
 Ala
 Ala
 Asp

 1
 5
 5
 6ly
 Cys
 Arg
 Lys
 Asp
 Arg
 Pro
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Ser
 Arg
 Ala
 Ala
 Gly
 Leu
 Ser
 Arg
 Pro
 Ala
 Gly
 Leu
 Ser
 Arg
 Pro
 Ala
 Gly
 Gly
 Leu
 Ser
 Arg
 Pro
 Ala
 Gly
 Gly
 Leu
 Ser
 Arg
 Pro
 Ala
 Gly
 Gly
 Leu
 Ser
 Arg
 Pro
 Ala
 Gly
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 Arg
 Pro
 Ala
 Gly
 Gly
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 Ser
 Arg
 Pro
 Ala
 Ala
 Gly
 Arg
 Cys
 Pro</td

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<210> 9704
<211> 114
<212> PRT
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<sup>&</sup>lt;213> Enterobacter cloacae

 <400> 9704

 Asp Pro Ala Gly Phe Arg His Ala Arg Arg Arg Arg Asp Gly Arg Leu Ala 1
 5
 10
 15
 15

 Glu Leu Ala Gly Glu Arg Thr Met Cys Ile Gly Val Pro 30
 Gly Gln Ile 20
 25
 10
 Val Pro 61y Gly Gln Ile 30
 11

 His Ser Ile Asp Gly Asn Gln Ala Lys Val Glu Val Cys Gly Ile Leu 35
 40
 45
 45

 Arg Asp Val Asp Leu Thr Leu Val Gly Ser His Asp Glu Thr Gly Ala 50
 55
 60

 Ser Arg Leu Gly Gln Trp Val Leu Val His Val Gly Phe Ala Met Ser 70
 75
 80

 Val Ile Asn Glu Glu Glu Ala Arg Asp Thr Leu Asp Ala Leu Gln Asn 90
 95

 Met Phe Asp Val Glu Pro Asp Val Gly Ala Leu Leu Tyr Gly Glu Glu Glu 100
 105
 105
 110

 Arg
 100
 100
 105
 100
 110

<210> 9705 <211> 375 <212> PRT <213> Enterobacter cloacae

<400> 9705

His Met Arg Tyr Val Asp Glu Tyr Arg Ala Pro Glu Gln Val Leu Gln 10 Leu Ile Asp Arg Leu Lys Ser Arg Ala Ser Leu Leu Asp Tyr Thr Lys 25 20 Glu Lys Pro Leu Arg Ile Met Glu Val Cys Gly Gly His Thr His Ala 40 Ile Phe Lys Phe Gly Leu Asp Gln Leu Leu Pro Glu Asn Ile Glu Phe 55 60 Ile His Gly Pro Gly Cys Pro Val Cys Val Leu Pro Met Gly Arg Ile 70 75 Asp Ser Cys Leu Asp Ile Ala Ser Arg Pro Gly Val Ile Phe Cys Thr 85 90 Phe Gly Asp Ala Met Arg Val Pro Gly Lys Asn Gly Ser Leu Leu Gln 100 105 Ala Lys Ala Arg Gly Ala Asp Val Arg Ile Val Tyr Ser Pro Met Asp 120 Ala Leu Thr Leu Ala Met Ala Asn Pro Glu Arg Lys Val Val Phe Phe 135 140 Gly Leu Gly Phe Glu Thr Thr Met Pro Ala Thr Ala Ile Thr Leu Gln 150 155 Gln Ala Lys Ala Arg Asn Val Thr Asn Phe Tyr Phe Phe Cys Gln His 170 Ile Thr Leu Ile Pro Thr Leu Arg Ser Leu Leu Glu Ala Pro Asp Asn 185 Gly Ile Asp Ala Phe Leu Ala Pro Gly His Val Ser Met Val Ile Gly 200 Thr Glu Ala Tyr Gly Phe Ile Ala Glu Gln Tyr Asn Arg Pro Leu Val 215 220 Val Ala Gly Phe Glu Pro Leu Asp Leu Leu Gln Gly Val Thr Met Leu 230 235 Val Glu Gln Lys Ile Ala Ala Leu Ser Ala Val Glu Asn Gln Tyr Arg 245 250 Arg Val Val Pro Asp Ala Gly Asn Arg Arg Ala Gln Glu Ala Ile Ala 260 265 270 Asp Val Phe Ser Val Glu Gly Asp Ser Glu Trp Arg Gly Leu Gly Leu 280 285 Ile Ala Glu Ser Gly Val His Leu Thr Pro Ala Tyr Arg Ala Phe Asp

295 300 Ala Glu Ala His Phe Arg Pro Gln Pro Gln Gln Val Cys Asp Asp Pro 310 315 Arg Ala Arg Cys Gly Asp Val Leu Thr Gly Lys Cys Lys Pro His His 325 330 Cys Pro Leu Phe Gly Asn Ala Cys Asn Pro Gln Thr Ala Phe Gly Ala 345 Leu Met Val Ser Ser Glu Gly Ala Cys Ala Ala Trp Tyr His Tyr Arg 360 355 Asn Gln Glu Cys Glu Ala 370 <210> 9706 <211> 335 <212> PRT <213> Enterobacter cloacae <400> 9706 Arg Leu Met Lys Lys Val Leu Cys Ala Leu Gly Leu Ala Val Ala Ser Met Ser Thr Ala Leu Ala Thr Thr Tyr Pro Leu Thr Ile Glu Asn Cys 25 Gly Tyr Lys Glu Thr Phe Thr Lys Ala Pro Glu Arg Val Val Ala Leu 40 Gly Gln Asn Thr Val Glu Ile Leu Leu Leu Gly Leu Glu Asp Lys 55 Val Lys Ala Ser Ala Phe Trp Pro Thr Lys Val Leu Pro Gln Leu Ala 75 Glu Gln Asn Ala Lys Ile Lys Thr Leu Thr Val Glu Ile Pro Thr Leu 85 Glu Ser Ile Leu Ala Gln Asn Pro Asp Phe Val Pro Ala Gln Leu Pro 105 Leu Leu Gly Pro Glu Ser Lys Val Ala Lys Arg Glu Asp Leu Ala 120 125 Thr Val Gly Val Asn Ser Tyr Leu Ser Pro Gly Met Cys Ala Thr Lys 135 140 Lys Ala Ala Gly Asp Met Tyr Gly Ser Arg Gln Thr Leu Trp Asp Met 155 150 Thr Tyr Leu Tyr Gln Glu Ile Glu Asp Phe Ala Lys Ile Phe Asn Val 170 165 Glu Ala Arg Gly Gln Ala Val Ile Ala Asp Phe Lys Lys Arg Glu Ala 180 185 190 Asp Leu Arg Gln Glu Phe Gly Lys Asn Asn Lys Asp Leu Ser Phe Val 205 200 Phe Trp Phe Ser Ser Ser Pro Ser Ala Asp Ala Tyr Val Gly Gly 215 220 Lys Asn Ser Ala Ser Gly Phe Ile Ala Asn Val Leu Gly Gly His Asn 230 235 Ala Ile Thr Ser Glu. Thr Glu Trp Pro Thr Val Gly Trp Glu Ser Ile 245 250 Ile Ala Ala Asn Pro Asp Val Ile Val Val Ser Ser Leu Asp Arg Asn 265 Arg Trp Ala Leu Asp Asn Ala Glu Glu Lys Ile Lys Phe Leu Lys Ser 280 Asp Pro Ala Val Ser Gln Met Glu Ala Val Lys Lys Gly His Ile Val 295 Val Met Asp Gly Gln Ala Met Asn Pro Thr Ile Arg Thr Leu Tyr Gly 310 315

Ala Glu Gln Val Gly Glu Gln Ile Arg Lys Leu Gly Leu Asp

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<210> 9707
<211> 249
<212> PRT
<213> Enterobacter cloacae
<400> 9707
Arg Met His Trp Arg Asn Leu Thr Cys Ser Ala Cys Arg Arg Glu Arg
Gln Pro Gly Arg Cys Gln Ser Ser Tyr Trp Val Ser Ala Pro Gly Ala
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Val Ser Leu Ser Ala Gly Ala Phe Ala Gly Ala Phe Ala Ala Phe Ala
Phe Val Ala Phe Leu Thr Asn Gly Ala Arg Gly Gly Asn Glu Arg Thr
Ile Leu Ala Gly Val Ala Ala Ser Gln Leu Phe Asn Ala Ile Thr Ala
Tyr Thr Ile Ser Thr Ser Ala Ser Ala Gln Gln Ala Arg Asp Val Met
Phe Trp Leu Leu Gly Ser Phe Ser Gly Val Arg Trp Pro Glu Phe Gln
                                105
            1.00
                                                    110
Leu Ala Leu Val Val Leu Ala Gly Leu Ala Val Cys Leu Tyr Tyr
       115
                            120
                                                125
Ser Arg Ala Leu Asp Ala Phe Thr Phe Gly Asp Asp Ala Ala Ser
                        135
                                            140
Leu Gly Ile Ala Val Pro Trp Val Arg Leu Ala Leu Phe Thr Thr
                    150
                                        155
Ala Leu Ile Thr Ala Thr Ile Val Ser Met Ala Gly Ser Ile Gly Phe
                                    170
                165
Val Gly Leu Val Val Pro His Val Met Arg Phe Leu Phe Gly Pro Leu
            180
                                185
                                                    190
His Arg Thr Leu Leu Ile Ala Ser Ala Leu Ala Gly Ala Ile Leu Met
       195
                            200
                                                205
Val Leu Ala Asp Ile Ala Ser Arg Met Leu Ile Ala Pro Gln Ser Leu
                       215
                                           220
Pro Val Gly Val Val Thr Ala Leu Val Gly Val Pro Phe Phe Ala Val
                   230
                                        235
Ile Ile Tyr Arg Ser Arg Asn Lys
                245
<210> 9708
<211> 145
<212> PRT
<213> Enterobacter cloacae
<400> 9708
Arg Glu Tyr Phe Ser Val Gly Val Ser Met Glu Leu Arg Gln Glu Ala
Phe His Leu Leu Arg Gln Leu Phe Gln Gln His Thr Ala Gln Trp Gln
His Ala Leu Pro Glu Leu Thr Lys Pro Gln Tyr Ala Val Met Arg Ser
                            40
Ile Ala Glu Asn Pro Gly Ile Glu Gln Val Ala Leu Thr Glu Val Ala
                        55
Val Ser Thr Lys Ala Thr Leu Ala Glu Met Leu Ser Arg Met Glu Ala
                    70
                                        75
Arg Gly Leu Val Arg Arg Glu His Asp Pro Ala Asp Lys Arg Arg Arg
                85
                                    90
Phe Val Phe Leu Thr Ala Glu Gly Glu Ala Leu Leu Glu Ser Ser Lys
           100
                               105
Pro Ile Gly Asn Glu Val Asp Glu Ala Phe Leu Gly Arg Leu Asn Gly
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120

Ala Glu Arg Glu Gln Phe Ser Ala Leu Ile Lys Lys Met Met Gln Gly 135 145 <210> 9709 <211> 472 <212> PRT <213> Enterobacter cloacae <400> 9709 Lys Leu Thr Thr Ala Phe Val Ser Pro Ile Ala Ser Ala Ala Val Lys Leu Pro Val Ser Ala Thr Ala Ile Asn Ile Ala Val Arq Cys Lys 20 Leu Ser Ile Ala Cys Leu Val Asn Cys Gln Asn Asn Val Asp Ser Ile Ser Cys Phe Val Ala Phe Ile Arg Asn Val Arg Ala Asp Thr Ile Arg His Leu Thr Gly Gly Thr Ser Met Thr Tyr Arg Ser Lys Ile Ala Val 70 75 Val Phe Leu Leu Gly Phe Phe Leu Asp Leu Ile Asn Met Phe Ile Ala 85 90 Ser Val Ala Phe Pro Ala Met Ala Arg Ala Phe Asn Thr Thr Pro Ser 100 105 Ala Leu Ala Trp Val Ser Asn Gly Tyr Ile Ala Gly Leu Thr Leu Val 120 115 125 Ile Pro Phe Ser Ser Ile Leu Thr Arg Arg Val Gly Pro Lys Arg Val 135 140 Ile Leu Leu Ser Leu Leu Phe Ser Ala Ala Ser Val Ala Ala Gly 150 155 Leu Ser Ser Leu Glu Ser Leu Ile Ala Trp Arg Val Val Gln Gly 165 170 Ala Gly Gly Gly Leu Leu Ile Pro Val Gly Gln Ala Leu Thr Trp Gln 180 185 Gln Phe Lys Pro His Glu Arg Ala Arg Leu Ser Ser Ala Val Met Leu 195 200 Val Ala Leu Leu Ala Pro Ala Cys Ser Pro Ala Val Gly Gly Met Leu 215 220 Val Gln Thr Phe Ser Trp Arg Trp Ile Phe Phe Ala Thr Leu Pro Val 230 235 Val Ile Val Thr Phe Ala Leu Ala Cys Ala Trp Leu Lys Thr Glu Pro 245 250 . Ser Pro Ile Thr Pro Thr Arg Thr Val Asn Leu Ser Leu Leu Thr Asp 260 265 Pro Leu Leu Arg Leu Ser Met Leu Ile Tyr Val Cys Val Pro Gly Ile 280 Phe Ile Gly Val Asn Val Thr Gly Met Tyr Tyr Leu Gln Ser Glu Ala 295 300 Asn Met Thr Pro Ala Ala Thr Gly Met Leu Met Leu Pro Trp Ser Val 315 Ala Ser Phe Leu Ala Ile Thr Ala Thr Gly Arg Tyr Phe Asn Arg Ile 330 Gly Pro Arg Pro Leu Val Val Ile Gly Cys Leu Leu Gln Ala Thr Gly 345 Ile Leu Leu Val Asn Val Gly Pro Ala Met Leu Leu Pro Ala Val 360 365 Ala Phe Ala Leu Met Gly Ala Gly Gly Ser Leu Cys Ser Ser Thr Ala 375 380

Gln Ser Ser Ala Phe Leu Thr Met Arg Pro Glu Asp Met Pro Asp Ala

395

Ser Ala Leu Trp Asn Leu Asn Arg Gln Leu Ser Phe Phe Ala Gly Ala 405 410 Leu Leu Leu Ala Gln Ala Leu Ser Phe Met Gln Ala Tyr Leu Ser Pro 420 425 430 Leu Ala Ala Trp His Gly Met Phe Val Phe Ala Ala Val Ile Thr Leu 435 440 Leu Pro Val Leu Tyr Val Tyr Arg Leu Asn Asn Thr Gln Leu Leu Ala 455 Gln Leu Gln Gln Glu Gln Pro 470 <210> 9710 <211> 405

<212> PRT

<213> Enterobacter cloacae

<400> 9710

Asn Cys Ser Leu Met Thr Ser Arg Pro Val Ala Leu Arg Leu Pro Gly 10 Leu Arg Leu Arg His Thr Thr Met Lys Ile Val Ile Ala Pro Asp Ser 25 Tyr Lys Glu Ser Leu Ser Ala Thr Glu Val Ala Gln Ala Ile Glu Lys 40 Gly Phe Arg Glu Ile Phe Pro Asp Ala His Tyr Val Ser Val Pro Val 55 Ala Asp Gly Glu Gly Thr Val Glu Ala Met Ile Ala Ala Thr Gln 70 75 Gly Thr Trp Gln Gln Ala Val Val Thr Gly Pro Leu Gly Glu Lys Val 85 95 90 Lys Ala Ser Trp Gly Ile Ser Gly Asp Gly Thr Thr Ala Phe Ile Glu 100 105 110 . Met Ala Ala Ala Ser Gly Leu Val Leu Val Pro Pro Ala Gln Arg Asn 120 125 Pro Leu Val Thr Thr Ser Arg Gly Thr Gly Glu Leu Ile Leu Arg Ala 135 140 Leu Asp Lys Gly Ala Arg Asn Ile Ile Ile Gly Ile Gly Gly Ser Ala 150 155 Thr Asn Asp Gly Gly Ala Gly Met Met Gln Ala Leu Gly Ala Lys Phe 165 170 Thr Asp Ala Asn Gly Thr Glu Ile Gly Tyr Gly Gly Ser Leu Met 185 Ala Leu Asn Arg Ile Asp Ile Ser Asp Leu Asp Pro Arg Leu Gln Gly 200 Cys Ala Ile Arg Val Ala Cys Asp Val Thr Asn Pro Leu Val Gly Glu 215 Ser Gly Ala Ser Arg Ile Phe Gly Pro Gln Lys Gly Ala Thr Glu Glu 230 235 Met Ile Leu Glu Leu Asp Ala Ser Leu Ser His Tyr Ala Glu Val Ile 250 Lys Lys Thr Leu Arg Ile Asp Val Asn Arg Val Pro Gly Ala Gly Ala 265 Ala Gly Gly Met Gly Ala Ala Leu Met Ala Phe Leu Gly Ala Glu Leu 280 285 Lys Ser Gly Ile Glu Ile Val Thr Gln Ala Leu Asn Leu Glu Glu His 295 300 Ile His Asp Cys Thr Trp Val Leu Thr Gly Glu Gly Arg Ile Asp Ser 310 315 Gln Ser Ile Asn Gly Lys Val Pro Val Gly Val Ala Ser Val Ala Lys 325 330 Lys Tyr His Lys Pro Val Ile Gly Ile Ala Gly Ser Leu Thr Gln Asp 340 345 350

 Val
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 Gln
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 Ile
 Asp
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<210> 9711 <211> 479 <212> PRT <213> Enterobacter cloacae

<400> 9711 Ser Pro His Ile Asn Asn Ser His Leu His Leu Leu Thr Arg Asn Arg Trp Arg Ser Glu Ser Tyr Lys Asn Asn Gln Leu Pro Tyr Lys Ile Ser Glu Cys Pro Met Asn Met Ala Thr Asn Ser Ser Val Ile Val Ser Asp Ser Pro Ala Ala Arg Arg Ala Gly Met Ser Glu Ser Glu Trp Arg Glu 5.5 Ala Ile Lys Phe Asp Ser Thr Asp Thr Gly Trp Val Ile Met Ser Ile 75 Gly Met Ala Ile Gly Ala Gly Ile Val Phe Leu Pro Val Gln Val Gly 85 Leu Met Gly Leu Trp Val Phe Leu Leu Ser Ser Ile Ile Gly Tyr Pro 100 105 110 Ala Met Tyr Leu Phe Gln Arg Leu Phe Ile Asn Thr Leu Ala Glu Ser 115 120 125 Pro Glu Cys Lys Asp Tyr Pro Ser Val Ile Ser Gly Tyr Leu Gly Lys 135 140 Asn Trp Gly Ile Leu Leu Gly Ala Leu Tyr Phe Val Met Leu Val Ile 150 155 Trp Met Phe Val Tyr Ser Thr Ala Ile Thr Asn Asp Ser Ala Ser Tyr 165 170 Leu His Thr Phe Gly Val Thr Asp Gly Leu Leu Ser Glu Asn Pro Phe 185 Tyr Gly Leu Phe Leu Ile Cys Ile Leu Val Ala Ile Ser Ser Arg Gly 200 205 Glu Lys Leu Phe Lys Val Ser Ser Leu Met Val Leu Thr Lys Leu 215 220 Phe Val Val Ala Ala Leu Gly Leu Ser Met Ile Gly Leu Trp His Leu 230 235 Ala Asn Val Gly Met Leu Pro Pro Met Gly Leu Leu Ile Lys Asn Ala 245 250 Ile Ile Thr Leu Pro Phe Thr Leu Thr Ser Ile Leu Phe Ile Gln Thr 265 Leu Ser Pro Met Val Ile Ser Tyr Arg Ser Arg Glu Lys Ser Val Glu 280 Val Ala Arg His Lys Ala Leu Arg Ala Met Asn Ile Ala Phe Gly Val 295 300 Leu Phe Val Thr Val Phe Phe Tyr Ala Val Ser Phe Thr Leu Ala Met 310 315 Gly His Asp Glu Ala Val Lys Ala Tyr Glu Gln Asn Ile Ser Ala Leu 325 330 Ala Ile Ala Ala Gln Phe Ile Ser Gly Asp Gly Ala Gly Trp Val Lys 345 350 Ile Val Ser Val Ile Leu Asn Ile Phe Ala Val Met Thr Ala Phe Phe

. 360

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Gly Val Tyr Leu Gly Phe Arg Glu Ala Thr Gln Gly Ile Val Met Asn
    370
                        375
                                             380
Ile Leu Arg Arg Lys Met Pro Ala Glu Lys Ile Asn Glu Asn Ala Val
                    390
                                         395
Gln Arg Gly Ile Met Leu Phe Ala Ile Leu Leu Ala Trp Ser Ala Ile
                405
                                     410
Val Leu Asn Ala Pro Val Leu Ser Phe Thr Ser Ile Cys Ser Pro Ile
            420
                                 425
Phe Gly Met Val Gly Cys Leu Ile Pro Ala Trp Leu Val Tyr Lys Val
        435
                            440
Pro Ala Leu His Lys Tyr Lys Gly Val Ser Leu Val Ile Ile Val Ile
                        455
                                             460
Thr Gly Leu Leu Cys Val Ser Pro Phe Leu Ala Phe Ser
                    470
<210> 9712
<211> 505
<212> PRT
<213> Enterobacter cloacae
<400> 9712
Thr Glu Leu Arg Pro Phe Glu Val Asp Met Gln Tyr Ile Lys Ile His
                                     10
Ser Leu Asp Asn Val Ala Val Ala Leu Ala Asp Leu Ala Glu Gly Thr
                                 25
Glu Val Thr Phe Asp Asn Gln Ser Val Thr Leu Arg Gln Ala Ile Gly
                            40
Arg Gly His Lys Phe Ala Leu Ile Pro Ile Ala Lys Gly Glu Asn Val
                        55
Val Lys Tyr Gly Leu Pro Ile Gly His Ala Leu Ala Asp Ile Ala Pro
                                         75
                    70
Gly Glu Tyr Ile His Ser His Asn Thr Arg Thr Asn Leu Ser Asp Leu
                85
                                     90
Asp Glu Tyr Ser Tyr Gln Pro Asp Phe Gln Ala Glu Glu Gly Gln Ala
            100
                                105
                                                     110
Ala Asp Arg Glu Val Gln Ile Tyr Arg Arg Ala Ser Gly Glu Val Gly
        115
                            120
                                                 125
Ile Arg Asn Glu Leu Trp Ile Leu Pro Thr Val Gly Cys Val Asn Gly
                        135
                                             140
Ile Ala Arg Gln Ile Gln Thr Arg Phe Leu Lys Glu Thr Asn Asn Ala
145 150 155 160 Glu Gly Thr Asp Gly Val His Leu Phe Ser His Thr Tyr Gly Cys Ser
                                                         175
               165
                                    170
Gln Leu Gly Asp Asp His Ile Asn Thr Arg Thr Met Leu Gln Asn Met
            180
                                185
Val Arg His Pro Asn Ala Gly Ala Val Leu Val Ile Gly Leu Gly Cys
                            200
                                                 205
Glu Asn Asn Gln Val Asp Ala Phe Arg Asp Thr Leu Gly Glu Phe Asp
                        215
                                             220
Pro Glu Arg Val His Phe Met Val Cys Gln His Gln Asp Asp Glu Val
                    230
                                        235
Glu Ala Gly Val Glu Gln Leu His Gln Leu Tyr Glu Val Met Arg His
                                    250
Asp Lys Arg Glu Pro Gly Lys Leu Ser Glu Leu Lys Phe Gly Leu Glu
                                265
Cys Gly Gly Ser Asp Gly Leu Ser Gly Ile Thr Ala Asn Pro Met Leu
                            280
                                                 285
Gly Arg Phe Ser Asp Tyr Val Ile Ala Asn Gly Gly Thr Thr Val Leu
                        295
                                            300
Thr Glu Val Pro Glu Met Phe Gly Ala Glu Arg Ile Leu Met Ser His
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Cys Arg Asp Glu Glu Thr Phe Glu Lys Thr Val Thr Met Val Asn Asp
                 325
                                     330
 Phe Lys Gln Tyr Phe Ile Ala His Asn Gln Pro Ile Tyr Glu Asn Pro
             340
                                 345
 Ser Pro Gly Asn Lys Ala Gly Gly Ile Thr Thr Leu Glu Glu Lys Ser
                             360
 Leu Gly Cys Thr Gln Lys Ala Gly Ala Ser Gln Val Val Asp Val Leu
                         375
                                             380
     370
Arg Tyr Gly Glu Arg Leu Lys Thr His Gly Leu Asn Leu Leu Ser Ala
                     390
                                         395
 Pro Gly Asn Asp Ala Val Ala Thr Ser Ala Leu Ala Gly Ala Gly Cys
                 405
                                     410
 His Met Val Leu Phe Ser Thr Gly Arg Gly Thr Pro Tyr Gly Gly Phe
             420
                                 425
 Val Pro Thr Val Lys Ile Ala Thr Asn Ser Glu Leu Ala Ala Lys Lys
                             440
 Lys His Trp Ile Asp Phe Asp Ala Gly Gln Leu Ile His Gly Lys Ala
                         455
                                              460
Met Pro Gln Leu Leu Thr Glu Phe Val Asp Thr Ile Val Glu Phe Ala
                     470
                                         475
 Asn Gly Arg Gln Thr Cys Asn Glu Lys Asn Asp Phe Arg Glu Leu Ala
                 485
                                     490
 Ile Phe Lys Ser Gly Val Thr Leu
             500
                                 505
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 <212> PRT
 <213> Enterobacter cloacae
. <400> 9713
 Asp Thr Gly Phe Ser Asp Pro Ala Tyr Thr Ala Arg Gly Leu Cys Gln
 Ser Arg Asn His Ala Cys Pro Gly Ser Val Phe Pro Ala Pro His Arg
Ala Phe Pro Arg Gln Ser Gly His Glu Pro Gly Lys Val Asn Ala Pro
                             40
 Asp Ser Pro Gly Asp Lys Ser Ala Gly Ser Ser Lys Pro Gln Asn Ser
                         55
 Val Lys Thr Gly Ile Leu Thr His Pro Phe Gln Gly Tyr Ala Lys Phe
                     70
 Tyr His Ser Gly Gly Pro Met Ser His Leu Asp Asn Gly Phe Arg Ser
                                     90
                 85
Leu Asn Leu Lys Arg Phe Pro Glu Thr Asp Asp Val Asn Pro Leu Gln
                                 105
             100
Ala Trp Glu Ala Asp Glu Tyr Leu Leu Gln Gln Leu Asp Glu Thr
                             120
        115
                                                  125
Glu Ile Ser Gly Pro Val Leu Ile Leu Asn Asp Ala Phe Gly Ala Leu
                         135
                                             140
Ala Cys Ala Leu Ala Glu His Ala Pro Tyr Ser Ile Gly Asp Ser Tyr
                     150
                                         155
Leu Ser Glu Leu Ala Thr Arg Glu Asn Leu Arg His Asn Asp Ile Glu
                 165
                                     170
Glu Ser Ser Val Lys Phe Leu Asp Ser Thr Ala Asp Tyr Pro Gln Ala
             180
                                 185
 Pro Gly Val Val Leu Ile Lys Val Pro Lys Thr Met Ala Leu Leu Glu
                             200
Gln Gln Leu Arg Ala Leu Arg Lys Val Val Thr Pro Glu Thr Arg Ile
                        215
                                             220
 Ile Ala Gly Ala Lys Ala Arg Asp Ile His Thr Ser Thr Leu Glu Leu
```

230

```
Phe Glu Lys Val Leu Gly Pro Thr Thr Thr Thr Leu Ala Trp Lys Lys
                245
                                    250
Ala Arg Leu Ile Asn Cys Thr Phe Ser Ala Pro Ala Leu Ala Asp Ala
                                265
Pro Glu Thr Leu Ser Trp Lys Leu Glu Gly Thr Asp Trp Thr Ile His
                            280
                                                285
Asn His Ala Asn Val Phe Ser Arg Thr Gly Leu Asp Ile Gly Ala Arg
                        295
                                            300
Phe Phe Met Glu His Leu Pro Glu Asn Leu Glu Gly Glu Ile Val Asp
                    310
                                        315
Leu Gly Cys Gly Asn Gly Val Ile Gly Leu Thr Leu Leu Ala Lys Asn
                325
                                    330
                                                         335
Pro Glu Ala Ser Val Val Phe Ser Asp Glu Ser Pro Met Ala Val Ala
            340
                                345
Ser Ser Arg Leu Asn Val Glu Thr Asn Leu Pro Glu Ala Leu Asp Arg
        355
                            360
Cys Glu Phe Met Ile Asn Asn Ala Leu Ser Gly Val Glu Pro Phe Arg
                        375
Phe Asn Ala Val Phe Cys Asn Pro Pro Phe His Gln Lys His Ala Leu
                    390
Thr Asp Asn Val Ala Trp Glu Met Phe His His Ala Arg Arg Cys Leu
                                    410
Lys Ile Asn Gly Glu Leu Tyr Ile Val Ala Asn Arg His Leu Asp Tyr
            420
                                425
Phe His Lys Leu Lys Lys Ile Phe Gly Asn Cys Val Thr Ile Ala Thr
       435
                            440
Asn Asn Lys Phe Val Val Leu Lys Ser Val Lys Leu Gly Arg Arg Arg
465
<210> 9714
<211> 313
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(313)
<400> 9714
Val Ser Arg Pro Arg Gly Ser Gly Ala Gly Asn Ala Ser Gly Arg Ala
                                    10
Gln Arg Arg Ala Ala Pro Arg Gln Pro Arg Pro Asp Asp Gly
                                25
Ala Gly Val Trp Arg Ala Ile Met Lys Ile Leu Leu Lys Asn Arg Glu
                                                4.5
                            40
Leu Ser Ala Phe Leu Ala Ile Leu Ala Leu Phe Ala Val Leu Val Ala
                        55
Leu Asn Pro Ser Tyr Leu Ser Leu Gln Thr Leu Gly Met Ile Phe Ala
                   70
                                        75
Ser Ala Gln Ile Leu Ile Leu Leu Ala Ile Gly Ala Ala Leu Val Met
                                    90
Leu Thr Arg Asn Ile Asp Val Ser Val Gly Ser Thr Val Gly Leu Ser
                                105
Ala Ile Ala Val Gly Val Ala Leu Asn Ser Gly Tyr Ser Leu Pro Val
                            120
Ser Ile Leu Phe Ala Leu Ser Ile Gly Ala Leu Ala Gly Ala Phe Asn
                       135
Gly Phe Leu Val Val Gly Leu Arg Ile Pro Ala Ile Val Ala Thr Leu
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Lys

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Gly Thr Leu Gly Leu Tyr Arg Gly Ala Met Leu Leu Trp Thr Gly Gly
                                    170
                165
Lys Trp Ile Glu Gly Leu Pro Pro Gly Leu Lys Ser Leu Ser Glu Pro
            180
                                185
Ala Ala Val Gly Ile Ser Pro Leu Gly Met Leu Val Leu Ile Ile Ala
                            200
        195
Ala Thr Gly Ala Trp Thr Leu Ser Arg Thr Ala Phe Gly Arg Ile Phe
                        215
                                            220
Tyr Ala Val Gly Asp Asn Leu Ala Ala Ala Arg Gln Leu Gly Val Ala
                                        235
                    230
Val Asn Arg Thr Arg Met Ile Ala Phe Thr Leu Asn Gly Leu Leu Ala
                245
                                    250
Ala Cys Ala Gly Ile Val Phe Ala Ala Gln Ile Gly Phe Val Pro Asn
            260
                                265
Gln Thr Gly Ser Gly Leu Glu Met Lys Ala Ile Ala Ala Leu Arg Ala
        275
                            280
                                                 285
Gly Gly His Leu Ala Ala Gly Arg His Arg His Ala Asp Leu Ile Gln
                        295
                                            300
Pro Pro Gly Trp Lys Asp Gln Arg Xaa
                    310
<210> 9715
<211> 258
<212> PRT
<213> Enterobacter cloacae
<400> 9715
Val Met Ser Asn Asp Ile Phe Pro Asn Lys Phe Lys Ala Ala Leu Ala
                                    10
Ala His Gln Ile Gln Ile Gly Cys Trp Ser Ala Leu Ala Asn Pro Ile
Ser Thr Glu Val Leu Gly Leu Ala Gly Phe Asp Trp Leu Val Leu Asp
                            40
Gly Glu His Ala Pro Asn Asp Ile Asn Thr Phe Ile Pro Gln Leu Met
                        55
Ala Leu Lys Gly Ser His Ser Ala Pro Val Val Arg Val Pro Thr Asn
                    70
                                        75
Glu Pro Val Ile Ile Lys Arg Leu Leu Asp Ile Gly Phe Tyr Asn Phe
                                    90
                8.5
Leu Ile Pro Phe Val Glu Thr Glu Glu Glu Ala Val Gln Ala Val Ala
                                105
                                                     110
            100
Ala Thr Arg Tyr Pro Pro Glu Gly Ile Arg Gly Val Ser Val Ser His
                                                 125
                            120
Arg Ala Asn Met Phe Gly Thr Val Pro Asp Tyr Phe Ser Gln Ser Asn
                        135
                                            140
Lys Asn Ile Thr Ile Leu Val Gln Ile Glu Ser Gln Gln Gly Val Asp
                                        155
                    150
Asn Val Asp Ala Ile Ala Ala Thr Glu Gly Val Asp Gly Ile Phe Val
               165
                                    170
Gly Pro Ser Asp Leu Ala Ala Ala Phe Gly His Leu Gly Asn Ala Ser
                                185
His Pro Asp Val Gln Arg Ala Ile Gln His Ile Phe Ala Arg Ala Lys
                            200
Ala His Gly Lys Pro Cys Gly Ile Leu Ala Pro Val Glu Ala Asp Ala
                        215
                                            220
Arg Arg Tyr Leu Glu Trp Gly Ala Thr Phe Val Ala Val Gly Ser Asp
                    230
                                        235
Leu Gly Val Phe Arg Ala Ala Thr Gln Lys Leu Ala Asp Ala Phe Lys
                                    250
                245
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<210> 9716
<211> 304
<212> PRT
<213> Enterobacter cloacae
<400> 9716
Pro Ser Leu Arg Lys Gln Ile Met Thr Leu Lys Val Gly Phe Ile Gly
Leu Gly Ile Met Gly Lys Pro Met Ser Lys Asn Leu Ile Lys Ala Gly
                                25
Tyr Ser Leu Val Val Leu Asp Arg Asn Ser Asp Ala Val Ala Glu Val
                            40
Ile Ala Ala Gly Ala Glu Thr Ala Thr Thr Ala Lys Ala Ile Ala Glu
                        55
                                            60
Gln Cys Asp Val Ile Ile Thr Met Leu Pro Asn Ser Pro His Val Lys
                    70
                                        75
Glu Val Ala Leu Gly Glu Asn Gly Ile Ile Asp Gly Ala Lys Pro Gly
Leu Val Val Ile Asp Met Ser Ser Ile Ala Pro Leu Ala Ser Arg Glu
                                105
Ile Ser Glu Glu Leu Lys Ala Lys Gly Val Glu Met Leu Asp Ala Pro
                            120
Val Ser Gly Glu Pro Lys Ala Ile Asp Gly Thr Leu Ser Val Met
                        135
Val Gly Gly Asp Lys Ala Val Phe Asp Lys Tyr Tyr Asp Leu Met Lys
                    150
                                        155
Ala Met Ala Gly Ser Val Val His Thr Gly Glu Ile Gly Ala Gly Asn
                165
                                    170
Val Thr Lys Leu Ala Asn Gln Val Ile Val Ala Leu Asn Ile Ala Ala
            180
                                185
Met Ser Glu Ala Leu Thr Leu Ala Thr Lys Ala Gly Val Asn Pro Asp
                            200
        195
Leu Val Tyr Gln Ala Ile Arg Gly Gly Leu Ala Gly Ser Thr Val Leu
                        215
                                            220
Asp Ala Lys Ala Pro Met Val Met Asp Arg Asn Phe Arg Pro Gly Phe
                    230
                                        235
Arg Ile Asp Leu His Ile Lys Asp Leu Ala Asn Ala Leu Asp Thr Ser
                245
                                    250
His Gly Val Gly Ala Gln Leu Pro Leu Thr Ala Ala Val Met Glu Met
                                265
            260
Met Gln Ala Leu Arg Ala Asp Gly Leu Gly Thr Ala Asp His Ser Ala
                            280
Leu Ala Cys Tyr Tyr Glu Lys Leu Ala Lys Val Glu Ile Ala Arg
                        295
<210> 9717
<211> 311
<212> PRT
<213> Enterobacter cloacae
<400> 9717
Ala Gln Asn Ile Met Asn Thr Ile Ile Leu Pro Lys Thr Gln His Leu
Val Val Phe Gln Glu Val Ile Lys Ser Gly Ser Ile Gly Ser Ala Ala
Arg Gln Leu Gly Leu Thr Gln Pro Ala Val Ser Lys Ile Ile Ser Asp
Ile Glu Ser Tyr Phe Gly Val Glu Val Met Val Arg Lys Asn Thr Gly
Val Lys Leu Thr Ala Ala Gly Gln Val Leu Leu Ser Tyr Ala Glu Ser
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70
Ile Thr Arg Glu Met Lys Asn Met Val Ser Glu Ile Asn Ser Leu Ser
                85
Phe Ser Thr Val Met Asp Val Ser Phe Gly Tyr Pro Ser Leu Ile Gly
            100
                                105
Phe Thr Phe Leu Ser Gly Met Ile Lys Lys Phe Lys Glu Val Phe Pro
                            120
                                                 125
Lys Ala Arg Val Ser Met Tyr Glu Ala Gln Leu Ser Ser Phe Leu Pro
                        135
                                            140
Ala Ile Arg Asp Gly Arg Leu Asp Phe Ala Ile Gly Thr Leu Ser Asp
                    150
                                        155
Gly Met Gln Leu Gln Asp Leu His Val Glu Pro Leu Phe Glu Ser Glu
                                    170
Phe Val Leu Val Ala Ser Lys Ser Arg Thr Cys Thr Gly Pro Thr Arg
                                185
Leu Ala Ser Leu Thr His Glu Gln Trp Val Met Pro Gln Thr Asp Met
                            200
        195
Gly Tyr Tyr Asn Glu Leu Leu Thr Thr Leu Gln Asp Asn His Ile Ser
                        215
                                             220
Ile Glu Asn Ile Val Gln Thr Asp Ser Val Val Thr Ile Tyr Asn Leu
                    230
                                        235
Val Leu Asn Ala Asp Tyr Leu Thr Val Ile Pro Arg Asp Met Ile Ala
                245
                                    250
Pro Phe Gly Ser Asp Gln Phe Ile Val Leu Pro Val Glu Asp Glu Leu
            260
                                265
Pro Val Ala Arg Tyr Ala Ala Val Trp Ser Lys Asn Tyr Ser Ile Lys
                            280
        275
Lys Ser Ala Ser Val Leu Val Glu Leu Ala Lys Gln Tyr Ser Ser Met
                       295
Asn Thr Glu Lys Arg Arg
<210> 9718
<211> 343
<212> PRT
<213> Enterobacter cloacae
<400> 9718
Leu Cys Leu Lys Thr Met Asn Tyr Tyr Asn Glu Asp Ile Met His Ile
                                    10
Thr Tyr Asp Leu Pro Val Thr Ile Glu Asp Ile Gln Asp Ala Arg Lys
            20
                                25
Arg Leu Ala Gly Lys Ile Tyr Lys Thr Gly Met Pro Arg Ser Asn Tyr
                            40
Leu Ser Glu Arg Cys Lys Gly Glu Ile Phe Leu Lys Phe Glu Asn Met
                        55
                                            60
Gln Arg Thr Gly Ser Phe Lys Ile Arg Gly Ala Phe Asn Lys Leu Ser
                    70
                                        75
Ser Leu Thr Asp Ala Glu Lys Arg Lys Gly Val Val Ala Cys Ser Ala
                                    90
Gly Asn His Ala Gln Gly Val Ser Leu Ser Cys Ala Met Leu Gly Ile
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Asp Gly Lys Val Val Met Pro Met Gly Ala Pro Lys Ser Lys Val Ala 115 120 125

Ala Thr Arg Asp Tyr Ser Ala Glu Val Val Leu His Gly Glu Asn Phe 130 135 140

Asn Asp Thr Ile Ala Lys Val Ser Glu Ile Val Glu Met Glu Gly Arg 150 150 155 160

Ile Phe Ile Pro Pro Tyr Asp Asp Pro Lys Val Ile Ala Gly Gln Gly 165 170 175

Thr Ile Gly Leu Glu Ile Leu Glu Asp Leu Tyr Asp Val Asp Asn Val

185 180 Ile Val Pro Ile Gly Gly Gly Leu Ile Ala Gly Ile Ala Thr Ala 200 Ile Lys Ser Ile Asn Pro Thr Ile Asn Ile Ile Gly Val Gln Ser Glu 215 220 Asn Val His Gly Met Ala Ala Ser Tyr Gln Ala Gly Glu Ile Thr Asn 230 235 His Arg Ile Thr Gly Thr Leu Ala Asp Gly Cys Asp Val Ser Arg Pro 245 250 Gly Asn Leu Thr Phe Glu Ile Val Arg Glu Leu Val Asp Asp Ile Val 265 Leu Val Ser Glu Asp Glu Ile Arg Asn Ser Met Ile Ala Leu Ile Gln 280 Arg Asn Lys Val Val Thr Glu Gly Ala Gly Ala Leu Ala Cys Ala Ala 295 300 Leu Leu Ser Gly Lys Leu Asp His Tyr Ile Gln Gly Arg Lys Thr Val 310 315 Cys Ile Ile Ser Gly Gly Asn Ile Asp Leu Ser Arg Val Ser Gln Ile 325 330 Thr Gly Phe Val Asp Ala 340 <210> 9719 <211> 503 <212> PRT <213> Enterobacter cloacae <400> 9719 Leu Thr Lys Lys Thr Ser Asp Ser Gly Asn Trp Cys Asp Asn Phe Ala Ala Ser Glu His Lys Leu Ser Asp Ala Pro Val Met Arg Lys Thr Ile 25 30 Met Thr Pro Phe Met Thr Asp Asp Phe Leu Leu Asp Thr Glu Phe Ala 40 Arg Arg Leu Tyr His Asp Tyr Ala Lys Asp Gln Pro Ile Phe Asp Tyr 55 His Cys His Leu Pro Pro Gln Gln Val Ala Glu Asn Tyr Arg Phe Lys 70 Asn Leu Tyr Asp Ile Trp Leu Lys Gly Asp His Tyr Lys Trp Arg Ala 90 Met Arg Thr Asn Gly Val Ala Glu Arg Leu Cys Thr Gly Asp Ala Thr 105 Asp Arg Glu Lys Phe Asp Ala Trp Ala Ala Thr Val Pro His Thr Ile 120 Gly Asn Pro Leu Tyr His Trp Thr His Leu Glu Leu Arg Arg Pro Phe 135 140 Gly Ile Thr Gly Lys Leu Leu Ser Pro Ala Thr Ala Asp Glu Ile Trp 150 155 Asp Gln Cys Asn Asp Leu Leu Ala Gln Asp Ser Phe Ser Ala Arg Gly 165 170 Ile Met Lys Gln Met Asn Val Lys Met Val Gly Thr Thr Asp Asp Pro 190 185 180 Val Asp Ser Leu Glu His His Ala Val Val Ala Lys Asp Ser Thr Phe 200 205 Asp Ile Lys Val Leu Pro Ser Trp Arg Pro Asp Lys Ala Phe Asn Ile 215 220 Glu Leu Pro Thr Phe Asn Asp Tyr Met Ala Lys Leu Ala Glu Val Ser 230 235 Asp Thr Asp Ile Arg Arg Phe Gly Asp Leu Gln Thr Ala Leu Thr Lys 245 250

Arg Leu Asp His Phe Ala Ala His Gly Cys Lys Val Ser Asp His Ala

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260
                                265
Leu Asp Val Val Leu Phe Ala Glu Ser Ser Glu Ala Glu Leu Asp Ser
                            280
Ile Leu Ala Arg Arg Leu Ser Gly Glu Ala Leu Ser Glu His Glu Val
                        295
                                            300
Ala Gln Phe Lys Thr Ala Val Leu Val Phe Leu Gly Ala Glu Tyr Ala
                    310
                                        315
Arg Arg Gly Trp Val Gln Gln Tyr His Ile Gly Ala Leu Arg Asn Asn
                                    330
Asn Gln Arg Gln Phe Lys Leu Leu Gly Ala Asp Val Gly Phe Asp Ser
                                345
Ile Asn Asp Arg Pro Met Ala Glu Glu Leu Ser Lys Leu Leu Ser Lys
                            360
Gln Asn Glu Gln Asn Leu Leu Pro Lys Thr Ile Leu Tyr Cys Leu Asn
                        375
                                            380
Pro Arg Asp Asn Glu Val Leu Gly Thr Met Ile Gly Asn Phe Gln Gly
                    390
                                        395
Glu Gly Met Pro Gly Lys Met Gln Phe Gly Ser Gly Trp Trp Phe Asn
                405
                                    410
Asp Gln Lys Asp Gly Met Glu Arg Gln Met Thr Gln Leu Ala Gln Leu
                                425
            420
Gly Leu Leu Ser Arg Phe Val Gly Met Leu Thr Asp Ser Arg Ser Phe
                            440
Leu Ser Tyr Thr Arg His Glu Tyr Phe Arg Arg Ile Leu Cys Gln Met
                        455
Ile Gly Arg Trp Val His Ala Gly Glu Ala Pro Ala Asp Ile Gln Leu
                    470
                                        475
Leu Gly Glu Met Val Arg Asn Ile Cys Phe Asn Asn Ala Arg Asp Tyr
                485
                                    490
Phe Ala Ile Glu Leu Asn
            500
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<210> 9720

<211> 525

<212> PRT

<213> Enterobacter cloacae

<400> 9720

Ser Leu His Gly Cys Lys Tyr Ser Ser Pro Ser Thr Leu Leu Asn Ile Ile Lys Ser Lys Asn His Leu Phe Asn Ser Gly Ala Met Met Thr Pro Leu Leu Asp Ala Arg Asp Ile Ser Lys Gln Phe Ser Gly Val Pro Val 40 Leu Lys Gly Ile Asp Phe Thr Leu Leu Ala Gly Gln Val His Ala Leu 55 Met Gly Gly Asn Gly Ala Gly Lys Ser Thr Leu Met Lys Ile Ile Ala 70 75 Gly Val Glu Thr Pro Asp Cys Gly Glu Leu Ser Val Ala Gly Glu Ser 90 85 Phe Thr Arg Leu Thr Pro Ala Gln Ala His Arg Leu Gly Ile Tyr Leu 100 105 110 Val Pro Gln Glu Pro Leu Leu Phe Pro Asn Leu Thr Val Arg Glu Asn 120 125 Ile Leu Phe Arg Leu Pro Arg Glu Arg Asp Arg Glu Lys Arg Leu Ala 140 135 Glu Lys Leu Arg Gln Leu Gln Cys Gln Leu Asn Leu Asp Ala Thr Ala Ser Thr Leu Glu Val Ala Asp Gln Gln Met Val Glu Ile Leu Arg Gly 170 Leu Met Arg Asn Ala Arg Ile Leu Ile Leu Asp Glu Pro Thr Ala Ser

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180
                                                    190
                                185
Leu Thr Pro Gly Glu Thr Glu Arg Leu Phe Arg Gln Ile Arg Ala Leu
                            200
                                                205
Gln Asp Leu Gly Val Gly Ile Val Phe Ile Ser His Lys Leu Pro Glu
                        215
                                            220
Ile Arg Gln Leu Ala Ser His Val Ser Val Met Arg Asp Gly Ala Val
                    230
                                        235
Val Leu Ser Gly Glu Thr Ala Gln Phe Asp Asp Asn Ala Leu Ile Ala
                                    250
Ala Met Thr Pro Val Ser Arg Glu Thr Ser Leu Ser Asp Thr Gln Lys
                                265
Leu Trp Leu Ala Leu Pro Gly Asn Arg Arg Thr Gln Ala Gln Asp Phe
                            280
Pro Val Leu Arg Val Glu Asp Leu Thr Gly Glu Gly Phe Ile Asp Leu
                        295
                                            300
Ser Leu Glu Ile Tyr Ala Gly Glu Ile Val Gly Leu Ala Gly Leu Val
                    310
                                        315
Gly Ser Gly Arg Thr Glu Phe Ala Glu Thr Leu Tyr Gly Leu Arg Pro
                325
                                    330
Val Arg Gly Gly Arg Val Trp Leu Glu Asn Gln Glu Ile Thr Thr Glu
                                345
            340
Pro Val Gly Ser Arg Leu Glu Lys Gly Leu Val Tyr Leu Pro Glu Asp
        355
                            360
Arg Gln Val Ser Gly Leu Phe Leu Asp Ala Pro Ile Arg Trp Asn Thr
                                            380
    370
                        375
Val Ala Leu Asn Glu Pro Ser Leu Trp Gln Gln Arg Lys Arg Glu Ser
                                        395
                    390
Ala Val Val Glu Arg Tyr His Arg Ala Leu Gly Ile Lys Leu Asn His
                405
                                    410
Ala Asp Gln Thr Val Arg Thr Leu Ser Gly Gly Asn Gln Gln Lys Val
                                425
            420
Leu Leu Ala Arg Cys Leu Glu Ala Asn Pro Leu Leu Ile Val Asp
                            440
Glu Pro Thr Arg Gly Val Asp Val Ser Ala Arg Ala Asp Ile Tyr Gln
                        455
                                            460
Leu Leu Lys Ser Val Ala Ala Gln Asn Val Ala Val Leu Met Ile Ser
                    470
                                        475
Ser Asp Leu Asp Glu Phe Pro Gly Leu Ala Asp Arg Val Leu Val Met
                                    490
His Gln Gly Val Leu Ser Gly Glu Leu Pro Arg His Ala Val Ser Leu
Asp Arg Met Met Ala Leu Ala Phe Gly Gly Gln Ser
<210> 9721
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<211> 271

<212> PRT

<213> Enterobacter cloacae

## <400> 9721

Gly Ala Arg Met Ser Ser Thr Asp Ser Ser Ala Glu Lys Arg Ile Thr 10 Gly Thr Ser Glu Arg Arg Glu Gln Ile Ile Gln Arg Leu Arg Ala Gln 20 25 Gly Ser Val Gln Val Asn Asp Leu Ser Leu Leu Phe Gly Val Ser Thr 40 Val Thr Ile Arg Asn Asp Leu Ala Phe Leu Glu Lys Gln Gly Ile Ala 55 Val Arg Ala Tyr Gly Gly Ala Leu Ile Cys Glu Gly Asn Ala Pro Gly 70 75 Val Glu Pro Ser Val Glu Asp Lys Ser Ser Leu Asn Thr Ala Val Lys

85 90 Arg Ser Ile Ala Gln Ala Ala Val Glu Leu Val Lys Pro Gly His Arg 100 105 110 Ile Ile Leu Asp Ser Gly Thr Thr Thr Phe Glu Ile Ala Arg Met Leu 120 125 Arg Gln His Thr Asp Val Ile Ala Met Thr Asn Gly Met Asn Val Ala 135 140 Asn Ala Leu Leu Glu Ala Glu Gly Val Glu Leu Leu Met Thr Gly Gly 150 155 His Leu Arg Arg Gln Ser Gln Ser Phe Tyr Gly Asp Gln Ala Glu Gln 170 165 Ser Leu Gln Asn Tyr His Phe Asp Leu Leu Phe Leu Gly Val Asp Ala 185 Ile Asp Leu Asp Arg Gly Val Ser Thr His Asn Glu Asp Glu Ala Arg 200 205 Leu Asn Arg Lys Met Cys Glu Val Ala Glu Arg Ile Ile Val Val Thr 215 220 Asp Ser Ser Lys Phe Asn Arg Ser Ser Leu His Lys Ile Ile Asp Thr 230 235 His Arg Ile Asp Met Ile Ile Val Asp Glu Gly Ile Pro Ala Glu Ser 250 245 Leu Glu Gly Leu Arg Lys Ser Gly Ile Asp Val Val Leu Val 260 265 <210> 9722

<211> 445

<212> PRT

<213> Enterobacter cloacae

<400> 9722 Leu Met Ser Asn Thr Glu Ser Ile Ile Val Gly Gln Thr Lys Thr Ser 10 Ser Trp Arg Lys Ser Asp Thr Thr Trp Thr Leu Gly Leu Phe Gly Thr 20 25 Ala Ile Gly Ala Gly Val Leu Phe Phe Pro Ile Arg Ala Gly Phe Gly Gly Leu Ile Pro Ile Leu Leu Met Leu Val Leu Ala Phe Pro Ile Ala 55 Phe Tyr Cys His Arg Ala Leu Ala Arg Leu Cys Leu Ser Gly Ser Asn 70 75 Val Ser Gly Asn Ile Thr Glu Thr Val Glu Glu His Phe Gly Lys Thr 90 Gly Gly Val Val Ile Thr Phe Leu Tyr Phe Phe Ala Ile Cys Pro Leu 105 110 Leu Trp Ile Tyr Gly Val Thr Ile Thr Asn Thr Phe Met Thr Phe Trp . 125 120 Glu Asn Gln Leu Gln Met Pro Ala Leu Asn Arg Gly Val Val Ala Leu 135 140 Phe Leu Leu Leu Met Ala Phe Val Ile Trp Phe Gly Lys Asp Leu 150 155 Met Val Lys Val Met Ser Tyr Leu Val Phe Pro Phe Ile Ala Ser Leu 165 170 Val Leu Ile Ser Leu Ser Leu Ile Pro Tyr Trp Asn Ser Ala Val Ile 180 185 Asp Gln Val Asn Leu Ser Asp Ile Ala Phe Thr Gly His Asp Gly Ile 200 205 Leu Val Thr Val Trp Leu Gly Ile Ser Ile Met Val Phe Ser Phe Asn 215 220 Phe Ser Pro Ile Val Ser Ser Phe Val Val Ser Lys Arg Glu Glu Tyr 230 235 Glu Pro Glu Phe Gly Lys Glu Phe Thr Glu Gln Lys Cys Ser Lys Ile

5283 245 250 Ile Gly Arg Ala Ser Leu Leu Met Val Ala Val Val Met Phe Phe Ala 260 265 Phe Ser Cys Leu Phe Thr Leu Ser Pro Gln Asn Met Ala Asp Ala Lys 280 285 Ala Gln Asn Ile Pro Val Leu Ser Tyr Leu Ala Asn His Phe Ala Ser 295 300 Met Ser Gly Ser Lys Ser Thr Phe Ala Thr Val Leu Glu Tyr Gly Ala 310 315 Ser Ile Ile Ala Leu Val Ala Ile Phe Lys Ser Phe Phe Gly His Tyr 330 Leu Gly Thr Leu Glu Gly Leu Asn Gly Leu Ile Ile Lys Phe Gly Tyr 345 Lys Gly Asp Lys Lys Asn Val Ser Val Gly Lys Leu Asn Thr Ile Ser 360 Met Val Phe Ile Met Gly Ser Thr Trp Ile Val Ala Tyr Ala Asn Pro 375 380 Asn Ile Leu Asp Leu Ile Glu Ala Met Gly Ala Pro Ile Ile Ala Ser 390 395 Leu Leu Cys Leu Leu Pro Met Tyr Ala Ile Arg Lys Ala Pro Ala Leu 405 410 Ala Lys Tyr Lys Gly Arg Thr Glu Asn Ile Phe Val Thr Val Val Gly 420 425 Leu Leu Thr Ile Leu Asn Ile Val Tyr Lys Leu Phe 440 <210> 9723 <211> 413 <212> PRT <213> Enterobacter cloacae <400> 9723 Thr Lys Ala Gln Glu Glu Arg Ser His Thr Met Ile Glu Phe Pro Val Val Leu Val Ile Asn Cys Gly Ser Ser Ser Val Lys Phe Ser Val Leu 25 Asp Ala Ala Ser Cys Asp Ala Leu Met Thr Gly Ile Ala Asp Gly Ile

Asn Thr Glu Lys Ala Phe Ile Ser Val Asn Gly Gly Glu Pro Val Arg Leu Ala His Gln Asp Tyr Glu Gly Ala Leu Ala Ala Ile Ala Leu Glu 70 Leu Glu Lys Arg Asn Leu Met Gly Ser Val Ala Leu Ile Gly His Arg Ile Ala His Gly Gly Asp Leu Phe Ser Glu Ser Thr Leu Ile Thr Glu 100 105 110 Glu Val Met Ala Gln Ile Arg Gln Val Ser Pro Leu Ala Pro Leu His 120 125 Asn Tyr Ala Asn Leu Ser Gly Val Glu Ala Ala Glu Arg Leu Phe Pro 135 140 Gly Val Gln Gln Val Ala Val Phe Asp Thr Ser Phe His Gln Thr Met 150 155 Pro Pro Gln Ala Tyr Leu Tyr Gly Leu Pro Tyr Arg Tyr Phe Glu Glu 165 170 Leu Gly Val Arg Arg Tyr Gly Phe His Gly Thr Ser His Arg Tyr Val 180 185 Ser Ala Gln Ala His Ala Leu Phe Gly Leu Ser Pro Asp Asp Ser Gly 200 205 Leu Val Ile Ala His Leu Gly Asn Gly Ala Ser Ile Cys Ala Val Arg 215 220 Asn Gly Val Ser Val Asp Thr Ser Met Gly Met Thr Pro Leu Glu Gly

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230
                                       235
Leu Val Met Gly Thr Arg Cys Gly Asp Val Asp Phe Gly Ala Met Ala
               245
                                  250
Trp Ile Ala Arg Gln Thr Gly Gln Ser Phe Glu Asp Leu Glu Arg Val
                               265
Val Asn Lys Glu Ser Gly Leu Leu Gly Ile Ser Gly Ile Ser Ser Asp
                            280
Leu Arg Ala Leu Glu Lys Ala Trp His Asp Gly Asn Glu Arg Ala Arg
                        295
Leu Ala Ile Lys Thr Phe Val His Arg Ile Ala Arg His Ile Ala Gly
                    310
                                        315
His Ala Ala Ser Leu His Arg Leu Asp Gly Val Val Phe Thr Gly Gly
                                    330
                325
Ile Gly Glu Asn Ser Val Leu Ile Arg Ala Leu Val Ala Glu His Leu
                                345
            340
Lys Val Phe Gly Ile Ile Leu Asp Glu Ser Lys Asn Ala Leu Pro Gly
                            360
Ser Ala Gly Glu Arg Val Ile Ser Thr Glu Ser Ser Arg Ala Ala Cys
                        375
                                            380
Ala Val Ile Pro Thr Asn Glu Glu Lys Met Ile Ala Leu Asp Ala Leu
                    390
                                        395
Arg Leu Gly Lys Val Thr Pro Ala Ala Ala Tyr Ala
                405
                                    410
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<210> 9724

<211> 769

<212> PRT

<213> Enterobacter cloacae

<400> 9724

Ser Glu Asn Leu Met Lys Val Thr Ile Asp Thr Gly Val Ala Pro Tyr Ser Asp Ala Trp Ala Gly Phe Arg Gly Glu Glu Trp Lys Asn Ala Ile 25 Asn Val Arg Asp Phe Ile Gln His Asn Tyr Thr Pro Tyr Glu Gly Asp Glu Ala Phe Leu Ala Gln Ala Thr Pro Ala Thr Thr Ala Leu Trp Gln Lys Val Met Val Gly Ile Arg Gln Glu Asn Ala Thr His Ala Pro Val Asp Phe Asp Thr Asn Ile Ala Thr Thr Ile Thr Ala His Gly Pro Gly Tyr Ile Asp Gln Glu Leu Glu Thr Ile Val Gly Leu Gln Thr Asp Lys 105 100 Pro Leu Lys Arg Ala Leu His Pro Tyr Gly Gly Ile Asn Met Ile Arg 120 125 Ser Ser Phe Glu Ala Tyr Gly Arg Glu Met Asp Pro Gln Phe Glu Tyr 135 140 Leu Phe Thr Asp Leu Arg Lys Thr His Asn Gln Gly Val Phe Asp Val 150 155 Tyr Ser Pro Glu Met Met Arg Cys Arg Lys Ser Gly Val Leu Thr Gly 165 170 Leu Pro Asp Gly Tyr Gly Arg Gly Arg Ile Ile Gly Asp Tyr Arg Arg 180 185 190 Val Ala Leu Tyr Gly Ile Ser Tyr Leu Val Arg Glu Arg Glu Leu Gln 200 205 Phe Ala Asp Leu Gln Gly Lys Leu Glu Arg Gly Glu Asp Leu Glu Ala 215 220

Thr Ile Arg Leu Arg Glu Glu Leu Ala Glu His Lys Arg Ala Leu Leu

Gln Ile Gln Gln Met Ala Ala Asn Tyr Gly Phe Asp Ile Ser Arg Pro

235

245 250 Ala Met Asn Ala Gln Glu Ala Val Gln Trp Leu Tyr Phe Ala Tyr Leu 260 265 Ala Ala Val Lys Ser Gln Asn Gly Gly Ala Met Ser Leu Gly Arg Thr 280 285 Ala Ser Phe Leu Asp Ile Tyr Ile Glu Arg Asp Met Gln Ala Gly Arg 295 300 Leu Asn Glu Val Gln Ala Gln Glu Leu Ile Asp His Phe Ile Met Lys 310 315 Ile Arg Met Val Arg Phe Leu Arg Thr Pro Glu Phe Asp Thr Leu Phe 325 330 Ser Gly Asp Pro Ile Trp Ala Thr Glu Val Ile Gly Gly Met Gly Leu - 340 345 Asp Gly Arg Thr Leu Val Thr Lys Asn Ser Phe Arg Tyr Leu His Thr 360 365 Leu His Thr Met Gly Pro Ala Pro Glu Pro Asn Leu Thr Ile Leu Trp 375 380 Ser Glu Lys Leu Pro Ile Ala Phe Lys Lys Tyr Ala Ala Gln Val Ser 390 395 Ile Val Thr Ser Ser Leu Gln Tyr Glu Asn Asp Asp Leu Met Arg Thr 405 410 Asp Phe Asn Ser Asp Asp Tyr Ala Ile Ala Cys Cys Val Ser Pro Met 420 425 Val Ile Gly Lys Gln Met Gln Phe Phe Gly Ala Arg Ala Asn Leu Ala 435 440 Lys Thr Leu Leu Tyr Ala Ile Asn Gly Gly Val Asp Glu Lys Leu Lys 455 460 Ile Gln Val Gly Pro Lys Thr Glu Pro Leu Leu Asp Glu Val Leu Asp 470 475 Tyr Asp Thr Val Met Ala Ser Leu Asp His Phe Met Asp Trp Leu Ala 485 490 Val Gln Tyr Ile Ser Ala Leu Asn Leu Ile His Tyr Met His Asp Lys 500 505 Tyr Ser Tyr Glu Ala Ser Leu Met Ala Leu His Asp Arg Asp Val Tyr 515 520 Arg Thr Met Ala Cys Gly Ile Ala Gly Leu Ser Val Ala Ala Asp Ser 535 Leu Ser Ala Ile Lys Tyr Ala Thr Val Lys Pro Val Arg Asp His Thr 550 555 Gly Leu Ala Val Asp Phe Ile Ile Glu Gly Asp Tyr Pro Gln Tyr Gly 570 565 Asn Asn Asp Asp Arg Val Asp Ser Ile Ala Cys Asp Leu Val Glu Arg 585 Phe Met Lys Lys Ile Gln Ala Leu Pro Thr Tyr Arg Asn Ala Val Pro 595 600 605 Thr Gln Ser Ile Leu Thr Ile Thr Ser Asn Val Val Tyr Gly Gln Lys 615 620 Thr Gly Asn Thr Pro Asp Gly Arg Arg Gly Gly Thr Pro Phe Ala Pro 630 635 Gly Ala Asn Pro Met His Gly Arg Asp Arg Lys Gly Ala Val Ala Ser 645 650 Leu Thr Ser Val Ala Lys Leu Pro Phe Thr Tyr Ala Lys Asp Gly Ile 660 665 670 Ser Tyr Thr Phe Ser Ile Val Pro Gln Ala Leu Gly Lys Asp Glu Pro 680 685 Val Arg Lys Thr Asn Leu Val Gly Leu Leu Asp Gly Tyr Phe His His 695 700 Glu Ala Thr Ile Glu Gly Gly Gln His Leu Asn Val Asn Val Met Asn 710 715 Arg Glu Met Leu Leu Asp Ala Ile Ala His Pro Glu Asn Tyr Pro Asn 725 730

Leu Thr Ile Arg Val Ser Gly Tyr Ala Val Arg Phe Asn Ala Leu Thr 740 745 750 Arg Glu Gln Gln Gln Asp Val Ile Ser Arg Thr Phe Thr Gln Ala Met 755 760 765

<210> 9725 <211> 466 <212> PRT <213> Enterobacter cloacae <400> 9725 Arg Arg Ile Ala Gly Asn Tyr Arg Asn Tyr Arg Ala Ala Ala Leu Cys 10 Phe Ser Phe Pro Arg Leu Leu Met Arg Leu Asn Lys Val Val Thr Met 20 25 Ser Glu Gln Ile Asn Pro Leu Trp Asn His Phe Ile Arg Ala Val Gln 40 45 Glu Glu Val Lys Pro Ala Leu Gly Cys Thr Glu Pro Val Ser Leu Ala 55 Leu Ala Cys Ala Met Ala Ala Gly Gln Leu Ser Gly Glu Val Thr Arg 70 Ile Glu Ala Trp Val Ser Pro Asn Leu Met Lys Asn Gly Leu Gly Val 90 Thr Val Pro Gly Thr Gly Met Val Gly Leu Pro Ile Ala Ala Ala Leu 100 105 Gly Ala Thr Gly Gly Asn Ala His Ala Gly Leu Glu Val Leu Lys Asp 120 Ala Ser Ala Glu Ala Leu Thr Arg Ala Lys Ala Leu Leu Asn Ala Gly 135 140 Leu Val Gln Val Lys Leu Gln Glu Pro Cys Asp Glu Ile Leu Tyr Ser 150 155 Arg Ala Cys Val Tyr Ala Gly Glu Ser Ser Ala Met Val Thr Ile Ala 170 Gly Gly His Thr Arg Val Val Glu Val Val Cys Gln Gly Glu Thr Cys Phe Arg Leu Asp Asp Arg Gln Ser Gln Asn Asp Asp Pro Leu Ala 195 200 Val Leu Ser Thr Thr Thr Leu Ser Gln Ile Leu Glu Phe Val Glu Gln 215 Val Pro Phe Asp Ala Ile Arg Phe Ile Leu Asp Ala Gly Arg Leu Asn 230 235 Asp Ala Leu Ser Arg Glu Gly Leu Arg Gly Asn Trp Gly Leu His Ile 245 250 Gly Ala Thr Leu Asn Lys Gln Arg Ala Arg Gly Trp Met Ala Gln Asp 265 Leu Gly Ser Asp Ile Ile Ile Arg Thr Ser Ala Ala Ser Asp Ala Arg 275 280 Met Gly Gly Ala Thr Leu Pro Ala Met Ser Asn Ser Gly Ser Gly Asn 300 295 Gln Gly Ile Thr Ala Thr Met Pro Val Val Val Ala Glu His Val 310 315 Gln Ala Asp Asp Glu Arg Leu Ala Arg Ala Leu Met Leu Ser His Leu 330 325 Ser Ala Ile Tyr Ile His Tyr Gln Leu Pro Arg Leu Ser Ala Leu Cys 340 345 Ala Ala Thr Thr Ala Gly Met Gly Ala Ala Ala Gly Met Ala Trp Leu 360 365 Met Gly Gly Ser Tyr Gln Thr Ile Ala Met Ala Ile Gly Ser Met Ile 375

His Asn Lys

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Gly Asp Val Ser Gly Met Ile Cys Asp Gly Ala Ser Asn Ser Cys Ala
                    390
                                        395
Met Lys Val Ser Thr Ser Val Thr Ser Ala Trp Lys Ala Val Met Met
                405
                                    410
Ala Leu Asp Asp Thr Ala Val Thr Gly Asn Glu Gly Ile Val Ala His
            420
                                425
Asp Val Glu Gln Ser Ile Ser Asn Leu Cys Ala Leu Ala Cys Arg Ser
                            440
Met Gln Ala Thr Asp Arg Gln Ile Ile Glu Ile Met Ala Ser Lys Val
                        455
Leu
465
<210> 9726
<211> 324
<212> PRT
<213> Enterobacter cloacae
<400> 9726
Arg Tyr Gly Arg Cys Ile Val Ser Gln Ile Phe Cys Leu Val Cys Ser
                                    10
                                                         15
Asn Phe Leu Asn Glu Asn Glu Met Ala Lys Glu Arg Ala Leu Thr Leu
                                25
Glu Ala Leu Arg Val Met Asp Ala Ile Asp Arg Arg Gly Ser Phe Ala
                            40
                                                 45
Ala Ala Ala Asp Glu Leu Gly Arg Val Pro Ser Ala Leu Ser Tyr Thr
                        55
Met Gln Lys Leu Glu Glu Glu Leu Asp Val Leu Phe Asp Arg Ser
                    70
Gly His Arg Thr Lys Phe Thr Asn Val Gly Arg Met Leu Leu Glu Arg
                85
                                    90
Gly Arg Val Leu Leu Glu Ala Ala Asp Lys Leu Thr Thr Asp Ala Glu
                                105
Ala Leu Ala Arg Gly Trp Glu Thr His Leu Thr Leu Val Thr Glu Ala
                            120
Leu Val Pro Thr Glu Ala Leu Phe Pro Leu Val Asp Arg Leu Ala Ala
                        135
                                            140
Lys Ala Asn Thr Gln Leu Ser Ile Ile Thr Glu Val Leu Ala Gly Ala
                    150
                                        155
Trp Glu Arg Leu Glu Thr Gly Arg Ala Asp Ile Val Ile Ala Pro Asp
                165
                                    170
Met His Phe Arg Ser Ser Ser Glu Ile Asn Ser Arg Lys Leu Tyr Ser
                                185
            180
                                                    190
Val Met Asn Val Tyr Val Ala Ala Pro Asp His Pro Ile His Gln Glu
                            200
Pro Glu Pro Leu Ser Glu Val Thr Arg Val Lys Tyr Arg Gly Val Ala
                        215
                                            220
Val Ala Asp Thr Ala Arg Glu Arg Pro Val Leu Thr Val Gln Leu Leu
                    230
                                        235
Asp Lys Gln Pro Arg Leu Thr Val Thr Ser Leu Glu Asp Lys Arg Gln
                245
                                    250
Ala Leu Leu Ala Gly Leu Gly Val Ala Thr Met Pro Tyr Pro Phe Val
                                265
Glu Lys Asp Ile Ala Glu Gly Arg Leu Arg Val Val Ser Pro Glu Tyr
                            280
Thr Ser Glu Val Asp Ile Ile Met Ala Trp Arg Arg Asp Ser Met Gly
                        295
                                            300
Glu Ala Lys Ser Trp Cys Leu Arg Glu Ile Pro Lys Leu Phe Ala His
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<210> 9727 <211> 537 <212> PRT <213> Enterobacter cloacae <400> 9727 Gln Arg Gly Lys Leu Met Ser Tyr Leu Leu Ala Leu Asp Ala Gly Thr Gly Ser Val Arg Ala Val Ile Phe Asp Leu Gln Gly Asn Gln Ile Ala 25 Val Gly Gln Ala Glu Trp Lys His Leu Ser Val Glu Asn Val Pro Gly 40 Ser Met Glu Phe Asp Leu Asp Thr Asn Trp Arg Leu Ala Cys Arg Cys 55 Ile Gln Gln Ala Leu Glu Arg Ala Arg Leu Ser Ala Ala Asp Ile Gln 70 Ser Val Ala Cys Cys Ser Met Arg Glu Gly Ile Val Leu Tyr Asp Arg 8.5 90 Asn Gly Glu Ala Ile Trp Ala Cys Ala Asn Val Asp Ala Arg Ala Ser 100 105 110 Arg Glu Val Ala Glu Leu Lys Glu Ile His Asp Tyr Arg Phe Glu Ser 115 120 125 Glu Val Tyr Glu Val Ser Gly Gln Thr Leu Ala Leu Ser Ala Met Pro 135 140 Arg Leu Leu Trp Leu Ala His His Arg Pro Asp Ile Tyr Arg Lys Ala 155 150 Ala Thr Ile Thr Met Ile Ser Asp Trp Leu Ala Ala Lys Leu Ser Gly 165 170 Glu Leu Ala Val Asp Pro Ser Asn Ala Gly Thr Thr Gly Met Leu Asp 180 185 Leu Phe Ser Arg Asp Trp Arg Pro Ala Leu Leu Asp Met Ala Gly Leu 200 Arg Ala Asp Ile Leu Ser Pro Val Lys Glu Thr Gly Thr Val Leu Gly 215 220 Ala Ile Thr Arg Gln Ala Ala Gln Gln Cys Gly Leu Arg Glu Gly Thr 230 235 Pro Val Val Met Gly Gly Gly Asp Val Gln Leu Gly Cys Leu Gly Leu 250 Gly Val Val Arg Ala Gly Gln Thr Ala Val Leu Gly Gly Thr Phe Trp Gln Gln Val Val Asn Leu Pro Gln Val Arg Thr Asp Pro Glu Met Asn 280 Ile Arg Val Asn Pro His Val Ile Pro Gly Met Ala Gln Ala Glu Ser 295 Ile Ser Phe Phe Thr Gly Leu Thr Met Arg Trp Phe Arg Asp Ala Phe 310 315 Cys Ala Glu Glu Lys Leu Ile Ala Glu Arg Met Gly Met Asp Thr Tyr 330 325 Ser Leu Leu Glu Glu Met Ala Ser Arg Val Pro Ala Gly Ser His Gly 345 Val Met Pro Ile Phe Ser Asp Ala Met His Phe Lys Gln Trp Tyr His 360 Ala Ala Pro Ser Phe Ile Asn Leu Ser Ile Asp Pro Glu Lys Cys Asn 380 375 Lys Ala Thr Leu Phe Arg Ala Leu Glu Glu Asn Ala Ala Ile Val Ser 390 395 Ala Cys Asn Leu Ala Gln Ile Ser Arg Phe Ser Gly Val Thr Phe Glu 405 410

Ser Leu Val Phe Ala Gly Gly Gly Ala Lys Gly Ala Leu Trp Ser Gln 420 425 430

Ile Leu Ser Asp Val Thr Gly Leu Pro Val Arg Val Pro Glu Val Lys 440 Glu Ala Thr Ala Leu Gly Cys Ala Leu Ala Ala Gly Ala Gly Ala Gly 455 460 Leu Phe Ala Asp Met Ala Ser Thr Gly Glu Arg Leu Val Lys Trp Ser 470 475 Arg Glu Phe Thr Pro Asn Pro Gln His Arg Glu Leu Tyr Asp Gly Met 490 Met Gln Lys Trp Gln Ala Val Tyr Ala Asp Gln Leu Gly Leu Val Asp 505 Ser Gly Leu Thr Thr Ser Met Trp Gln Ala Pro Gly Leu Val Arg Ala 520 Ser Pro Ser Pro Arg Pro Ser Pro 530

<210> 9728

<211> 335

<212> PRT

<213> Enterobacter cloacae

<400> 9728

Thr Phe Met Ile Arg Phe Ala Val Ile Gly Thr Asn Trp Ile Thr Arg 10 Gln Phe Val Asp Ala Ala His Glu Thr Gly Lys Tyr Lys Leu Thr Ala 20 25 Val Tyr Ser Arg Ser Leu Glu Gln Ala Gln Ser Phe Ala Asn Asp Tyr 40 Leu Val Glu His Leu Phe Thr Ser Leu Asp Glu Met Ala Gln Ser Asp 55 Ala Ile Asp Ala Val Tyr Ile Ala Ser Pro Asn Ser Leu His Phe Pro 70 75 Gln Thr Lys Leu Phe Leu Ser His Lys Lys His Val Ile Cys Glu Lys 90 Pro Leu Ala Ser Asn Ile Glu Glu Val Glu Ala Ala Ile Ala Leu Ala 100 105 Arg Glu Asn Gln Val Val Leu Phe Glu Ala Phe Lys Thr Ala Ser Leu 120 Pro Asn Phe Leu Leu Gln Gln Ser Leu Pro Lys Ile Gly Lys Val Arg Lys Ala Phe Ile Asn Tyr Cys Gln Tyr Ser Ser Arg Tyr Gln Arg 155 150 Tyr Leu Asp Gly Glu Asn Pro Asn Thr Phe Asn Pro Ala Phe Ser Asn 170 165 Gly Ser Ile Met Asp Ile Gly Phe Tyr Cys Leu Ala Ser Ala Val Ala 185 Leu Trp Gly Glu Pro His Gly Val Thr Ala Thr Ala Ser Leu Leu Glu 195 200 Ser Gly Val Asp Ala His Gly Val Val Leu Asp Tyr Gly Asp Phe 215 220 Ser Val Thr Leu Gln His Ser Lys Val Ser Asp Ser Val Leu Pro Ser 235 230 Glu Ile Gln Gly Glu Asp Gly Ser Leu Val Ile Glu Lys Ile Ser Glu 245 250 Cys Gln Lys Leu Ser Ile Val Pro Arg Gly Gly Lys Ala Gln Glu Leu 260 265 Thr Gln Pro Gln His Ile Asn Thr Met Leu Tyr Glu Ala Glu Val Phe 280 Ala Arg Leu Val Glu Asp Asn Glu Val Asn His Pro Gly Leu Ala Ile 295 300 Ser Arg Thr Thr Ala Lys Leu Gln Thr Glu Ile Arg Arg Gln Thr Gly 310 315

Val Ile Phe Pro Ala Asp Gly Val Asn Val Glu Ala Val Ala 325 330 <210> 9729 <211> 415 <212> PRT <213> Enterobacter cloacae <400> 9729 Arg Met Ser Thr Gln Ser Arg Gly Leu Phe Ala Arg Leu Ala Gln Gly Ser Leu Val Lys Gln Ile Leu Val Gly Leu Val Leu Gly Ile Leu Leu 20 25 Ala Met Val Ser Lys Pro Ala Ala Glu Ala Thr Gly Leu Leu Gly Thr 40 Leu Phe Val Gly Ala Leu Lys Ala Val Ala Pro Val Leu Val Leu Met 55 Leu Val Met Ala Ser Ile Ala Asn His Gln His Gly Gln Lys Thr Asn 70 Ile Arg Pro Ile Leu Phe Leu Tyr Leu Leu Gly Thr Phe Ser Ala Ala 90 85 Leu Thr Ala Val Val Phe Ser Phe Leu Phe Pro Ser Thr Leu His Leu 100 105 110 Thr Ser Ala Ala Gly Asp Ile Thr Pro Pro Ser Gly Ile Val Glu Val 120 Leu Arg Gly Leu Leu Met Ser Met Val Ser Asn Pro Ile Thr Ala Leu 135 140 Met Ser Gly Asn Tyr Ile Gly Ile Leu Val Trp Ala Ile Gly Leu Gly 150 155 Phe Ala Leu Arg His Gly Asn Glu Thr Thr Lys Asn Leu Val Asn Asp 165 170 Leu Ser Asn Ala Val Thr Phe Met Val Lys Leu Val Ile Arg Phe Ala 185 190 Pro Val Gly Ile Phe Gly Leu Val Ser Ser Thr Leu Ala Thr Thr Gly 200 205 Phe Asp Ala Leu Trp Gly Tyr Ala Gln Leu Leu Val Val Leu Val Gly 215 220 Cys Met Leu Leu Val Ala Leu Val Ile Asn Pro Leu Leu Val Phe Trp 230 235 Gln Ile Arg Arg Asn Pro Tyr Pro Leu Val Leu Thr Cys Leu Arg Glu 245 250 Ser Gly Val Tyr Ala Phe Phe Thr Arg Ser Ser Ala Ala Asn Ile Pro 265 Val Asn Met Ala Leu Ala Glu Lys Leu Asn Leu Asp Arg Asp Thr Tyr 280 Ser Val Ser Ile Pro Leu Gly Ala Thr Val Asn Met Ala Gly Ala Ala 295 Ile Thr Ile Thr Val Leu Thr Leu Ala Ala Val His Thr Leu Gly Ile 310 315 Pro Val Asp Leu Pro Thr Ala Leu Leu Ser Val Val Ala Ser Leu 325 330 Cys Ala Cys Gly Ala Ser Gly Val Ala Gly Gly Ser Leu Leu Ile 345 Pro Leu Ala Cys Asn Met Phe Gly Ile Pro Asn Glu Ile Ala Met Gln 360 Val Val Ala Val Gly Phe Ile Ile Gly Val Leu Gln Asp Ser Cys Glu 375 380 Thr Ala Leu Asn Ser Ser Thr Asp Val Leu Phe Thr Ala Ala Ala Cys 395 390 Gln Ala Glu Asp Ala Arg Leu Ala Lys Asn Ala Leu Arg Ser

410

415

<210> 9730 <211> 449 <212> PRT <213> Enterobacter cloacae <400> 9730 Val Val Ala Val Ser Arg His Gly Asn Asn Ile Thr Met Arg Phe Tyr Met Arg Lys Ile Lys Gly Leu Arg Trp Tyr Met Ile Ala Leu Val Thr 25 20 Leu Gly Thr Val Leu Gly Tyr Leu Thr Arg Asn Thr Val Ala Ala Ala 40 Ala Pro Thr Leu Met Glu Glu Leu His Ile Ser Thr Gln Gln Tyr Ser 55 Tyr Ile Ile Ala Ala Tyr Ser Ala Ala Tyr Thr Val Met Gln Pro Val 70 Ala Gly Tyr Val Leu Asp Ile Leu Gly Thr Lys Ile Gly Tyr Ala Phe 90 Phe Ala Val Ala Trp Ala Val Phe Cys Gly Ala Thr Ala Leu Ala Gly 105 Ser Trp Gly Gly Leu Ala Leu Ala Arg Gly Ala Val Gly Ala Ala Glu 115 120 125 Ala Ala Met Ile Pro Ala Gly Leu Lys Ala Ser Ser Glu Trp Phe Pro 135 140 Ala Lys Glu Arg Ser Ile Ala Val Gly Tyr Phe Asn Val Gly Ser Ser 150 155 Ile Gly Ala Met Ile Ala Pro Pro Leu Val Val Trp Ala Ile Val Met 170 His Ser Trp Gln Met Ala Phe Ile Ile Ser Gly Val Leu Ser Phe Ala 185 180 Trp Ala Met Ala Trp Leu Ile Phe Tyr Lys His Pro Arg Asp Gln Lys 200 Lys Leu Ser Asp Glu Glu Arg Asp Tyr Ile Ile Asn Gly Gln Glu Ser 215 Gln His Gln Thr Asp Asn Gly Lys Lys Met Ser Val Trp Gln Ile Leu 235 Gly Thr Arg Gln Phe Trp Gly Ile Ala Leu Pro Arg Phe Leu Ala Glu 245 250 Pro Ala Trp Gly Thr Phe Asn Ala Trp Ile Pro Leu Phe Met Phe Lys 260 265 Val Tyr Gly Phe Asn Leu Lys Glu Ile Ala Met Phe Ala Trp Met Pro 280 Met Leu Phe Ala Asp Leu Gly Cys Ile Val Gly Gly Tyr Leu Pro Pro 295 300 Leu Phe Gln Arg Trp Phe Gly Val Asn Leu Ile Val Ser Arg Lys Met 310 315 Val Val Thr Met Gly Ala Leu Leu Met Ile Gly Pro Gly Met Ile Gly 325 330 Leu Phe Thr Ser Pro Tyr Val Ala Ile Ala Leu Leu Cys Ile Gly Gly 340 345 Phe Ala His Gln Ser Leu Ser Gly Ala Leu Ile Thr Leu Ser Ser Asp 360 Val Phe Gly Arg Asn Glu Val Ala Thr Ala Asn Gly Leu Thr Gly Met 375 380 Ala Ala Trp Thr Ala Ser Thr Leu Phe Ala Leu Val Val Gly Ala Leu 390 395

Ala Asp Thr Ile Gly Phe Ser Pro Leu Phe Ala Val Leu Ala Val Phe

Asp Leu Leu Gly Ala Val Val Ile Trp Thr Val Leu Lys Ser Lys Ser 420 425 430

410

Ala Asp Glu Leu Ala Lys Glu Ser Leu Gly Gly Pro Ala Thr Gln Ser 435 440 445

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<210> 9731
<211> 138
<212> PRT
<213> Enterobacter cloacae
<400> 9731
Phe Trp Asn Thr Ala Tyr Ala Val Thr Gln Trp Lys Val Ser Ile Met
                                    10
Lys Tyr Arg Ile Thr Leu Ala Leu Ala Leu Phe Ser Leu Ser Thr Ala
            20
Ser Phe Ala Met Ser Leu Cys Gln Glu Lys Glu Gln Asp Ile Gln Arg
                            40
Glu Ile Ser Tyr Ala Glu Lys His Asn Asn Gln His Arg Ile Asp Gly
                        55
Leu Lys Lys Ala Leu Ser Glu Val Lys Asp Asn Cys Thr Asp Ser Lys
                    70
                                                             80
Leu Arg Ala Asp His Gln Glu Lys Ile Ala Glu Gln Lys Asp Glu Ile
                                    90
Ala Glu Arg Arg Gln Asp Leu Gln Glu Ala Lys Glu Lys Gly Asp Ala
            100
                                105
Glu Lys Ile Ala Lys Arg Glu Arg Lys Leu Gln Glu Ala Gln Asp Glu
                            120
Leu Lys Ala Leu Glu Ala Arg Asp Tyr
   130
                        135
<210> 9732
<211> 100
<212> PRT
<213> Enterobacter cloacae
<400> 9732
Val Val Ser Asp Lys Ala Glu Arg Gln Lys Arg Lys Ala Tyr Leu Leu
Ser Gln Ile Gln Gln Arg Leu Asp Leu Ser Ala Ser Arg Arg Asp
Trp Val Glu Ala Thr His Arg Phe Asp Arg Gly Trp Asn Thr Val Leu
                            40
Ser Leu Arg Ser Trp Ala Leu Val Gly Ser Ser Val Met Ala Ile Trp
                        55
Ser Val Arg His Pro Asn Met Leu Ile Arg Trp Ala Arg Arg Gly Phe
                    70
                                        75
Gly Ala Trp Ser Ala Trp Arg Leu Val Lys Thr Thr Leu Arg Gln Gln
Gln Leu Arg
            100
<210> 9733
<211> 239
<212> PRT
<213> Enterobacter cloacae
<400> 9733
Arg Glu Val Lys Phe Met Ile Thr Thr Arg Thr Ala Lys Gln Cys Gly
Gln Ala Asp Phe Gly Trp Leu Gln Ala Arg Tyr Thr Phe Ser Phe Gly
```

His Tyr Phe Asp Pro Lys Leu Leu Gly Tyr Ala Ser Leu Arg Val Leu 40 Asn Gln Glu Val Leu Ala Pro Gly Ala Ser Phe Gln Pro Arg Thr Tyr Pro Lys Val Asp Ile Leu Asn Leu Ile Leu Glu Gly Glu Ala Glu Tyr 70 75 Arg Asp Ser Glu Gly Asn His Val Gln Ala Lys Ala Gly Glu Ala Leu 85 90 Leu Ile Ser Thr Gln Pro Gly Ile Ser Tyr Ser Glu His Asn Leu Ser 100 105 Lys Asp Lys Thr Leu Thr Arg Met Gln Leu Trp Leu Asp Ala Cys Pro 115 120 Glu Arg Glu Asn Pro Leu Val Gln Lys Ile Asp Leu Lys Gly Asp Gln 135 140 Gln Gln Leu Ile Ala Ser Pro Asp Gly Ser Lys Gly Ser Leu Gln Leu 150 155 Arg Gln Gln Val Trp Leu His His Ile Glu Leu Lys Lys Gly Glu Gln 165 170 Ala Ser Phe Gln Leu His Gly Pro Arg Ala Tyr Leu Gln Ser Ile His 180 185 190 Gly Thr Val His Ala Val Thr His Thr Glu Glu Lys Glu Ala Leu Thr 200 Cys Gly Asp Gly Ala Phe Ile Arg Asp Glu Ala Asn Ile Thr Leu Val 215 Ala Asp Thr Pro Leu Arg Ala Leu Leu Ile Asp Leu Pro Val 230 <210> 9734 <211> 525 <212> PRT <213> Enterobacter cloacae <400> 9734 Thr Met Ala Asp Ile Glu Ile Arg Gln Ala Ser Pro Thr Ala Phe Tyr Ile Lys Val His Asp Thr Asp Asn Val Ala Ile Ile Val Asn Asp Asn Gly Leu Lys Ala Gly Thr Arg Phe Pro Asp Gly Leu Glu Leu Ile Glu His Ile Pro Gln Gly His Lys Val Ala Leu Val Asp Ile Pro Ala His Gly Glu Ile Val Arg Tyr Gly Glu Val Ile Gly Tyr Ala Val Arg Ala 70 75 Ile Pro Gln Gly Ser Trp Ile Glu Glu Ser Leu Val Glu Leu Pro Thr 90 Ala Pro Pro Leu Glu Thr Leu Pro Leu Ala Thr Arg Val Pro Glu Pro 100 105 110 Leu Pro Pro Leu Glu Gly Tyr Thr Phe Glu Gly Tyr Arg Asn Ala Asp 120 125 Gly Ser Val Gly Thr Lys Asn Leu Leu Gly Ile Thr Thr Ser Val His 135 140 Cys Val Ala Gly Val Val Asp Tyr Val Val Lys Ile Ile Glu Arg Asp 150 · 155 Leu Leu Pro Lys Tyr Pro Asn Val Asp Gly Val Val Gly Leu Asn His 170 Leu Tyr Gly Cys Gly Val Ala Ile Asn Ala Pro Ala Ala Val Val Pro 185 Ile Arg Thr Ile His Asn Ile Ala Leu Asn Pro Asn Phe Gly Glu 200 Val Met Val Ile Gly Leu Gly Cys Glu Lys Leu Gln Pro Glu Arg Leu

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Leu Gln Gly Thr Glu Asp Val Lys Ala Ile Pro Val Asp Asp Ala Ser
                    230
                                        235
Val Val Arg Leu Gln Asp Glu His His Val Gly Phe Arg Ser Met Val
                245
                                    250
Asp Asp Ile Leu Gln Val Ala Glu Arg His Leu Glu Lys Leu Asn Lys
                                265
Arg Gln Arg Glu Thr Cys Pro Ala Ser Glu Leu Val Val Gly Thr Gln
                            280
Cys Gly Gly Ser Asp Ala Phe Ser Gly Val Thr Ala Asn Pro Ala Val
                        295
                                             300
Gly Tyr Ala Ser Asp Leu Phe Val Arg Cys Gly Ala Thr Val Met Phe
                                        315
                    310
Ser Glu Val Thr Glu Val Arg Asp Ala Ile His Leu Leu Thr Pro Arg
                                    330
                325
Ala Val Asn Glu Glu Val Gly Lys Arg Leu Leu Glu Glu Met Ala Trp
            340
                                345
Tyr Asp Asn Tyr Leu Asp Met Gly Lys Thr Asp Arg Ser Ala Asn Pro
                            360
                                                 365
Ser Pro Gly Asn Lys Lys Gly Gly Leu Ala Asn Val Val Glu Lys Ala
    370
                        375
                                             380
Leu Gly Ser Ile Ala Lys Ser Gly Gln Ser Ala Ile Val Glu Val Leu
                    390
                                        395
Ser Pro Gly Gln Arg Pro Thr Lys Arg Gly Leu Ile Tyr Ala Ala Thr
                405
                                    410
Pro Ala Ser Asp Phe Val Cys Gly Thr Gln Gln Val Ala Ser Gly Ile
            420
                                425
Thr Val Gln Val Phe Thr Thr Gly Arg Gly Thr Pro Tyr Gly Leu Met
                            440
Ala Val Pro Val Ile Lys Met Ala Thr Arg Thr Glu Leu Ala Asn Arg
                        455
                                             460
Trp Tyr Asp Leu Met Asp Ile Asn Ala Gly Thr Ile Ala Thr Gly Glu
                    470
                                         475
Glu Ser Ile Glu Glu Val Gly Trp Lys Leu Phe His Phe Ile Leu Asp
                                    490
Val Ala Ser Gly Arg Lys Lys Thr Phe Ser Asp Gln Trp Gly Leu His
                                505
                                                     510
Asn Ser Leu Ala Val Phe Asn Pro Ala Pro Val Thr
                            520
                                                 525
```

<210> 9735

<211> 442

<212> PRT

<213> Enterobacter cloacae

<400> 9735

Met Pro Thr Pro Ser Glu Met Glu Arg Lys Val Lys His Leu Thr Glu 10 Met Val Glu Gln His Lys Arg Gly Asn Thr Asn Gly Ile Tyr Ala Val 25 Cys Ser Ala His Pro Leu Val Leu Glu Ala Ala Ile Arg Tyr Ala His 40 45 Ser Gln Gln Thr Pro Leu Leu Ile Glu Ala Thr Ser Asn Gln Val Asp 55 Gln Phe Gly Gly Tyr Thr Gly Met Thr Pro Ala Asp Phe Tyr Gly Phe 70 75 Val Cys Lys Leu Ala Gly Ser Leu Gly Phe Pro Thr Ser Gln Leu Ile 90 85 Leu Gly Gly Asp His Leu Gly Pro Asn Arg Trp Gln Asn Leu Pro Ala 100 105 Leu Gln Ala Met Ala Asn Ala Asp Asp Leu Ile Arg Ser Tyr Val Ala 120

```
Ala Gly Phe Lys Lys Ile His Leu Asp Cys Ser Met Ser Cys Glu Asp
                        135
                                            140
Asp Pro Val Pro Leu Thr Asp Ala Ile Val Ala Gly Arg Ala Ala Arg
                   150
                                       155
Leu Ala Lys Ile Ala Glu Thr Thr Cys Leu Glu Gln Phe Gly Val Ala
                                    170
                165
Asp Leu Val Tyr Val Ile Gly Thr Glu Val Pro Val Pro Gly Gly Ala
                                185
His Glu Thr Leu Thr Glu Leu Glu Val Thr Thr Pro Glu Ala Ala Arg
                            200
Ala Thr Leu Glu Ala His Arg His Ala Phe Glu Lys Glu Gly Leu Ser
                        215
                                            220
Asp Ile Trp Pro Arg Ile Ile Gly Leu Val Val Gln Pro Gly Val Glu
                    230
                                        235
Phe Asp His Ala His Val Cys Asp Tyr Gln Pro His Lys Ala Val Ala
                                    250
                245
Leu Ser Lys Met Val Glu Ala Tyr Asp Thr Leu Val Phe Glu Ala His
            260
                                265
                                                    270
Ser Thr Asp Tyr Gln Thr Pro Gln Ala Leu Arg Gln Leu Val Lys Asp
        275
                            280
His Phe Ala Ile Leu Lys Val Gly Pro Ala Leu Thr Phe Ala Leu Arg
                        295
                                            300
Glu Ala Leu Phe Ser Leu Ala Ala Ile Glu Glu Glu Leu Leu Pro Ala
                    310
                                        315
Lys Ala Cys Ser Gly Leu Arg His Val Leu Glu Asn Val Met Leu Asp
                325
                                    330
Arg Pro Glu Tyr Trp Gln Ser His Tyr His Gly Asp Gly Asn Ala Arg
            340
                                345
Arg Leu Ala Arg Gly Tyr Ser Tyr Ser Asp Arg Val Arg Tyr Tyr Trp
                            360
Pro Asp Ser Gln Ile Asp Asp Ala Phe Glu Arg Leu Val Arg Asn Leu
                        375
                                            380
Ala Asp Glu Pro Ile Pro Leu Pro Leu Ile Ser Gln Tyr Leu Pro Leu
                    390
                                        395
Gln Tyr Ser Lys Val Arg Asp Gly Ala Leu Ser Ser Thr Pro Arg Glu
                                    410
Leu Ile Leu Asp His Ile Gln Asp Ile Leu His Gln Tyr His Ala Ala
            420
                                425
Cys Glu Gly Val Thr Thr Gln His Ala
```

<210> 9736 <211> 314 <212> PRT

<213> Enterobacter cloacae

<400> 9736

Ser Thr Cys Cys Ala Asn Arg Leu Asn Pro Arg Arg Leu Arg Pro Arg 10 Lys Arg Asn Leu Lys Met Ala Ser Asn His Thr Thr Leu Pro Gly Val 25 Ser Glu Ser Glu Glu Thr Leu Leu Thr Gly Val Asn Glu Asn Val Tyr 40 45 Glu Asp Gln Ser Ile Gly Ala Glu Leu Thr Lys Lys Asp Ile Asn Arg 55 60 Val Ala Trp Arg Ser Met Leu Leu Gln Ala Ser Phe Asn Tyr Glu Arg 70 75 Met Gln Ala Ser Gly Trp Leu Tyr Gly Leu Leu Pro Ala Leu Lys Lys 90 Ile His Thr Asn Lys Arg Asp Leu Ala Arg Ala Met Lys Gly His Met 105

```
Gly Phe Phe Asn Thr His Pro Phe Leu Val Thr Phe Val Ile Gly Ile
                            120
                                                125
Ile Leu Ala Met Glu Arg Ser Lys Gln Asp Val Asn Ser Ile Gln Ser
                        135
                                            140
Thr Lys Ile Ala Val Gly Ala Pro Leu Gly Gly Ile Gly Asp Ala Met
                    150
                                        155
Phe Trp Leu Thr Leu Leu Pro Ile Cys Gly Gly Ile Gly Ala Ser Leu
                                    170
                165
Ala Leu Gln Gly Ser Ile Leu Gly Ala Val Val Phe Ile Val Leu Phe
            180
                                185
Asn Val Val His Leu Gly Leu Arg Phe Gly Leu Ala His Tyr Ala Tyr
                            200
                                                205
        195
Arg Met Gly Val Ala Ala Ile Pro Leu Ile Lys Ala Asn Thr Lys Lys
                        215
                                            220
Val Gly His Ala Ala Ser Ile Val Gly Met Thr Val Ile Gly Ala Leu
                    230
                                        235
Val Ala Thr Tyr Val Arg Leu Asn Thr Thr Leu Glu Ile Lys Ala Gly
                                    250
                245
Asp Ala Val Lys Leu Gln Thr Asp Val Ile Asp Lys Leu Met Pro
            260
                                265
Ala Phe Leu Pro Leu Val Tyr Thr Leu Ile Met Phe Trp Leu Val Arg
                            280
                                                285
Arg Gly Trp Ser Pro Leu Arg Leu Ile Gly Ile Thr Val Val Leu Gly
    290
                        295
                                            300
Val Val Gly Lys Phe Cys His Phe Leu
                    310
<210> 9737
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 9737
Ser Val Leu Ser Arg Gly Ser His Phe His Val Ala Pro Ser Arg Thr
                                    10
Tyr Asp Leu Asn Phe Tyr Lys Ser Ser Ile Met Ser Asp Lys Arg Thr
                                25
Ala Glu Glu Gly Arg Phe Ala Gly Leu Ala Leu Ala Glu Glu Leu
                            40
Val Ala Arg Val Ala Trp Cys Tyr Tyr His Asp Gly Leu Thr Gln Asn
                        55
Asp Ile Gly Glu Arg Leu Gly Leu Pro Arg Leu Lys Ile Ser Arg Leu
                                        75
                    70
Leu Glu Lys Gly Arg Gln Ser Gly Val Ile Arg Val Gln Ile Asn Ser
                                    90
                85
Arg Tyr Glu Gly Cys Leu Ala Leu Glu Thr Glu Leu Gln Gln Arg Phe
            100
                                105
                                                    110
Gly Leu Lys Leu Val Arg Val Met Pro Ala Leu Asn Thr Pro Pro Met
                                                125
        115
                            120
Asn Val Arg Leu Gly Ile Gly Ala Ala Gln Ser Leu Met Gly Val Leu
                        135
                                            140
Glu Pro Gly Gln Leu Leu Ala Val Gly Phe Gly Glu Thr Thr Met Ser
                    150
                                        155
Ser Leu Gln His Leu Ser Gly Phe Ile Ser Ser Gln Gln Ile Arg Leu
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170

Val Thr Leu Ser Gly Gly Val Gly Pro Tyr Met Thr Gly Ile Gly Gln
180
185
190
Leu Asp Ala Ala Cys Ser Val Ser Met Ile Pro Ala Pro Leu Arg Val
195
200
205
Ser Ser Ala Glu Val Ala Ġly Ile Leu Lys Arg Glu Thr Ser Val Arg

Asp Val Ile Leu Ala Ala Thr Ala Ala Asp Val Ala Val Val Gly Ile 230 235 Gly Ser Val Asn Gln Arg Arg Asp Ala Thr Ile Leu Arg Ser Gly Tyr 245 250 Ile Ser Glu Gly Glu Gln Leu Met Tyr Ala Arg Lys Gly Ala Val Gly 260 265 Asp Ile Leu Gly Tyr Phe Leu Asn Ala Glu Gly Glu Cys Val Glu Glu 280 285 Leu Glu Ile His Lys Glu Leu Leu Gly Val Thr Leu Asp Glu Leu Ala 295 Gln Leu Pro Thr Ile Val Gly Val Ala Gly Gly Glu Glu Lys Ala Asp 310 315 Ala Ile Tyr Ala Ala Leu Lys Gly Arg Arg Ile Asn Gly Leu Val Thr 325 330 Glu Glu Thr Thr Ala Arg Ala Val Leu Ala Leu Ala Gly 345

<210> 9738 <211> 688

<212> PRT

<213> Enterobacter cloacae

<400> 9738 Leu Ile Arg Pro His Asn Asn Phe Thr Leu Glu Glu Thr Met Ser 10 Arg Tyr Pro Ser Leu Phe Ala Pro Leu Asp Leu Gly Phe Thr Thr Leu Lys Asn Arg Val Leu Met Gly Ser Met His Thr Gly Leu Glu Glu Arg 40 Pro Asp Gly Ala Glu Arg Leu Ala Ala Phe Tyr Ala Glu Arg Ala Arg 55 His Gly Val Ala Leu Ile Val Thr Gly Gly Val Ala Pro Ala Pro Ser Gly Val Thr Met Glu Gly Gly Ala Val Leu Asn Asp Ala Ser Gln Leu 90 Ser His His Arg Ile Val Thr Asp Ala Val His Arg Glu Gly Gly Lys 100 105 Ile Ala Leu Gln Ile Leu His Thr Gly Arg Tyr Ser Tyr Gln Pro Asn 120 125 Leu Val Ala Pro Ser Ala Ile Gln Ala Pro Ile Asn Arg Phe Thr Pro 135 His Ala Leu Ser His Asp Glu Ile Leu Ala Leu Ile Asp Asp Phe Ala 150 155 Arg Cys Ala Ala Leu Ala Arg Glu Ala Gly Tyr Asp Gly Val Glu Val 165 170 Met Gly Ser Glu Gly Tyr Leu Ile Asn Glu Phe Leu Ala Ala Arg Thr 185 Asn Gln Arg Asp Asp Glu Trp Gly Gly Asp Tyr Ala Arg Arg Met Arg 195 200 205 Phe Ala Val Glu Val Val Arg Ala Val Arg Glu Arg Ala Gly Ala Asp 215 220 Phe Ile Ile Phe Arg Leu Ser Met Leu Asp Leu Val Glu Gly Gly 230 235 Gly Thr Phe Asp Glu Thr Val Gln Leu Ala Gln Ala Ile Glu Ala Ala 245 250 Gly Ala Thr Ile Ile Asn Thr Gly Ile Gly Trp His Glu Ala Arg Ile 260 265 Pro Thr Ile Ala Thr Pro Val Pro Arg Ala Ala Phe Ser Trp Val Thr 280 285 Arg Lys Leu Lys Gly Lys Val Ser Val Pro Leu Val Thr Thr Asn Arg

```
Ile Asn Asp Pro Gln Val Ala Asp Asp Val Ile Ser Arg Gly Asp Ala
                    310
                                        315
Asp Met Val Ser Met Ala Arg Pro Phe Leu Ala Asp Ala Glu Leu Leu
                325
                                    330
Ser Lys Ala Gln Ser Gly Arg Ala Asp Glu Ile Asn Thr Cys Ile Gly
                                345
Cys Asn Gln Ala Cys Leu Asp Gln Ile Phe Ala Gly Lys Val Thr Ser
                            360
Cys Leu Val Asn Pro Arg Ala Cys His Glu Thr Lys Met Pro Val Val
                        375
Thr Thr Val Asn Lys Lys Arg Leu Ala Val Val Gly Ala Gly Pro Ala
                    390
                                        395
Gly Leu Ala Phe Ala Val Asn Ala Ala Ser Arg Gly His Gly Val Thr
                405
                                    410
Leu Phe Asp Ala Gln Gly Glu Ile Gly Gln Phe Asn Ile Ala Lys
                                425
            420
Gln Ile Pro Gly Lys Asp Glu Phe Tyr Glu Thr Leu Arg Tyr Tyr Arg
                            440 .
Arg Met Ile Glu Val Thr Gly Val Asp Leu Arg Leu Asn Gln Phe Val
                        455
                                            460
Ser Ala Ala Asp Leu Ile Gly Phe Asp Glu Val Ile Leu Ala Ser Gly
                    470
                                        475
Ile Ala Pro Arg Thr Pro Ala Ile Glu Gly Ile Asp His Pro Lys Val
                485
                                    490
Leu Ser Tyr Leu Asp Val Leu Arg Asp Lys Ala Pro Val Gly Glu Lys
            500
                                505
                                                    510
Val Ala Ile Ile Gly Cys Gly Gly Ile Gly Phe Asp Thr Ala Met Tyr
                            520
Leu Ser Gln Pro Gly Glu Ala Thr Ser Gln Asn Ile Ala Glu Phe Cys
                        535
Val Glu Trp Gly Ile Asp Thr Ser Leu Ser Gln Ser Gly Gly Leu Arg
                    550
                                        555
Pro Glu Gly Pro Gln Leu Pro Lys Ser Pro Arg Gln Ile Val Met Leu
                                    570
Gln Arg Lys Ala Ser Lys Pro Gly Glu Gly Leu Gly Lys Thr Thr Gly
                                585
Trp Ile His Arg Ala Thr Leu Leu Ser Arg Gly Val Lys Met Ile Pro
                            600
Ala Val Ser Tyr Gln Lys Ile Asp Asp Gly Leu His Val Leu Ile
                        615
Gly Glu Pro Gln Leu Leu Arg Val Asp His Val Ile Leu Cys Ala
                    630
                                        635
Gly Gln Glu Pro Lys Arg Asp Leu Ala Asp Pro Leu Arg Glu Ala Gly
                645
                                    650
Lys Thr Val His Leu Ile Gly Gly Cys Asp Val Ala Met Glu Leu Asp
                                665
Ala Arg Arg Ala Ile Ala Gln Gly Thr Gln Leu Ala Leu Val Ile
                            680
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<210> 9739

<211> 173

<212> PRT

<213> Enterobacter cloacae

<400> 9739

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Ser Pro Leu Ala Leu Arg Phe Ser Tyr Ala Ile Val Ala Leu Met
                        55
                                            60
Met Phe Ser Ala Leu Ile Leu Leu Trp Ser Ala Leu Gln His Gln Glu
                    70
                                        75
Ser Thr Leu Ala Ile Arg Pro Val Ser Gln Gly Thr Ser Val Pro Asp
                                    90
                85
Gly Phe Ser Ile Trp His His Leu Asp Ala Asn Gly Ile Arg Phe Lys
                                105
Ser Ile Thr Pro Gln Asn Asp Val Leu Leu Ile Lys Phe Asp Ser Ser
                            120
Ala Gln Ser Ala Ala Ala Lys Ala Val Leu Asp Arg Thr Leu Pro Gln
                        135
                                            140
Gly Tyr Ile Ile Ala Gln Gln Asp Asp Ser His Val Ala Ser Trp
                    150
                                        155
Met Ser Arg Leu Arg Asp Thr Ser His Arg Phe Gly
                165
<210> 9740
<211> 157
<212> PRT
<213> Enterobacter cloacae
<400> 9740
Ser Leu Asp Gly Cys Gly Tyr Trp Arg Arg Ser Gly Cys Gly Ala Gly
                                    10
Cys Pro Ala Asp Ala Ser Leu Ile Met Glu Asp Pro Arg His Ala Gln
Gly Pro Ala Lys Asn Val Leu Gly Ile Gly Gln Arg Ile Leu Thr Thr
                            40
Leu Val Gly Ile Ala Glu Thr Arg Val Arg Leu Ala Val Val Glu Leu
Glu Glu Glu Lys Ala Asn Leu Phe Gln Met Leu Leu Met Leu Gly Leu
                    70
Thr Met Leu Phe Ala Ala. Phe Gly Leu Met Ser Leu Met Val Leu Ile
Ile Trp Ala Ile Asp Pro Gln Tyr Arg Leu Asn Ala Met Ile Ala Thr
                                105
Thr Val Val Leu Leu Val Ala Ala Leu Ile Gly Gly Ile Trp Thr Leu
                            120
His Lys Ala Arg Thr Ser Thr Phe Leu Arg His Thr Arg Gln Glu Leu
                        135
                                            140
Ala Asn Asp Arg Ala Leu Leu Glu Asp Asp Lys Ser
                    150
<210> 9741
<211> 138
<212> PRT
<213> Enterobacter cloacae
<400> 9741
Cys Gly Ser Leu Glu Ser Lys Met Lys Lys Leu Glu Asp Val Gly Val
                                    10
Leu Val Ala Arg Ile Leu Met Pro Ile Leu Phe Ile Thr Ala Gly Trp
                                25
Gly Lys Ile Thr Gly Tyr Ala Gly Thr Gln Gln Tyr Met Glu Ala Met
                            40
Gly Val Pro Gly Phe Leu Leu Pro Leu Thr Ile Leu Leu Glu Phe Gly
Gly Gly Leu Ala Val Leu Phe Gly Phe Leu Thr Arg Thr Thr Ala Leu
                    70
```

Phe Thr Ala Gly Phe Thr Leu Leu Thr Ala Phe Ile Phe His Ser Asn

85 90 Phe Ala Glu Gly Val Asn Ser Leu Met Phe Met Lys Asn Leu Thr Ile 105 Ala Gly Gly Phe Leu Leu Leu Ala Ile Thr Gly Pro Gly Ala Tyr Ser 120 Ile Asp Arg Leu Leu Asn Lys Lys Trp 130 <210> 9742 <211> 353 <212> PRT <213> Enterobacter cloacae <400> 9742 Ala Gly Tyr Thr Asp Tyr Ile Gln Ser Glu Glu Thr Ser Pro Arg Phe 10 Cys Tyr Leu Thr Glu Glu Lys Lys Met Gly Gln Leu Val Asp Gly Val Trp Gln Asp Val Trp Tyr Asp Thr Lys Ser Thr Gly Gly Arg Phe Lys 40 Arg Ser Val Ser Ala Phe Arg Asn Trp Leu Thr Ala Asp Gly Ala Pro Gly Pro Ser Gly Glu Gly Gly Phe Ala Ala Glu Lys Asp Arg Tyr His 70 · Leu Tyr Val Ser Leu Ala Cys Pro Trp Ala His Arg Thr Leu Ile Val 90 Arg Lys Leu Lys Gly Leu Glu Ser Leu Ile Pro Val Ser Val Val Asn 105 Pro Leu Met Leu Glu Asn Gly Trp Thr Phe Asp Ser Asp Phe Pro Ala 120 Ala Thr Gly Asp Glu Leu Tyr His His Asp Phe Leu Tyr Gln Leu Tyr 135 140 Leu Arg Ala Asp Pro His Tyr Thr Gly Arg Val Thr Val Pro Val Leu 150 155 Trp Asp Lys Lys Asn Gln Thr Ile Val Ser Asn Glu Ser Ala Glu Ile 165 170 Ile Arg Met Phe Asn Thr Ala Phe Asp Ala His Gly Ala Arg Ala Gly 185 180 190 Asp Tyr Tyr Pro Val Glu Leu Arg Glu Lys Ile Asp Glu Leu Asn Gly 200 Trp Ile Tyr Asp Asn Val Asn Asn Gly Val Tyr Lys Ala Gly Phe Ala 215 220 Thr Ser Gln Glu Ala Tyr Asp Glu Ala Val Gly Asn Val Phe Gly Ser 230 235 Leu Glu Arg Leu Glu Gln Ile Leu Gly Gln His Arg Tyr Leu Thr Gly 250 245 Asp Arg Leu Thr Glu Ala Asp Ile Arg Leu Trp Thr Thr Leu Ile Arg 265 Phe Asp Pro Val Tyr Val Thr His Phe Lys Cys Asp Lys His Arg Ile 280 285 Ser Asp Tyr Leu Asn Leu His Gly Phe Leu Arg Asp Ile Tyr Gln Met Pro Gly Ile Ala Glu Thr Val Asn Phe Asp His Ile Arg Thr His Tyr 310 315 Phe Arg Ser His Lys Thr Ile Asn Pro Thr Gly Ile Ile Ser Ile Gly 325 330 Pro Trp Gln Asp Leu Asp Glu Pro His Gly Arg Asp Val Arg Phe Gly

<210> 9743 <211> 163 <212> PRT

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<213> Enterobacter cloacae
<400> 9743
Lys Glu Glu Asn Ala Met Pro Asn Ile Val Leu Cys Arg Ile Asp Glu
Arg Leu Ile His Gly Gln Val Gly Val Gln Trp Val Gly Phe Ala Gly
            20
                                25
Ala Asn Leu Val Leu Val Ala Asn Asp Glu Val Ala Asp Asp Pro Val
Gln Gln Asn Leu Met Glu Met Val Leu Ala Glu Gly Ile Ala Val Arg
                        55
                                             60
Phe Trp Ser Leu Gln Lys Val Ile Asp Asn Ile His Arg Ala Ala Asp
                    70
                                        75
Arg Gln Lys Ile Leu Leu Val Cys Lys Thr Pro Ala Asp Phe Leu Thr
                                    90
Leu Val Glu Gly Gly Val Pro Ile Thr Arg Ile Asn Val Gly Asn Met
            100
                                105
                                                     110
His Tyr Ala Ser Gly Lys Gln Gln Ile Ala Lys Thr Val Ser Val Asp
                            120
Ala Asn Asp Ile Ala Ala Phe Asn Gly Leu Lys Ala Ala Gly Val Glu
                        135
Cys Phe Val Gln Gly Val Pro Thr Glu Thr Ala Leu Asp Leu Phe Lys
                    150
                                         155
145
Leu Leu
<210> 9744
<211> 392
<212> PRT
<213> Enterobacter cloacae
<400> 9744
Thr Cys Thr Leu Ser Arg Gly Ser Ala Arg Arg Gly Arg Asp Met Ser
                                    10
Gln Leu Leu Arg Ala Arg Arg Leu Leu Thr Gly Gln Gly Trp Leu Asp
Asp His Gln Leu Arg Met Asp Arg Gly Val Ile Thr Ala Ile Glu Pro
                            40
Ile Pro Ala Gly Val Asn Thr Arg Glu Ala Asp Leu Leu Cys Pro Ala
                                             60
                        55
Tyr Ile Asp Ile His Phe His Gly Gly Ala Gly Val Asp Val Met Asp
                    70
                                        75
Asp Ala Pro Asp Val Leu Asp Arg Leu Ala Leu His Lys Ala Arg Glu
                8.5
                                    90
Gly Val Gly Ala Phe Leu Pro Thr Thr Val Thr Ala Ser Leu Glu Ala
                                105
                                                     110
            100
Ile His Gly Ala Leu Arg Arg Ile Ala Arg Arg Cys His Ala Gly Gly
                            120
                                                 125
Pro Gly Ala Gln Leu Leu Gly Ser Tyr Leu Glu Gly Pro Tyr Phe Thr
                        135
                                             140
Pro Gln Asn Lys Gly Ala His Pro Pro Glu Leu Phe Arg Glu Leu Asp
                    150
Leu Ala Glu Leu Asp Glu Leu Ile Ala Val Ser Gln Asn Thr Leu Arg
                                    170
Val Val Ala Leu Ala Pro Glu Lys Val Asp Ala Leu Lys Ala Ile His
                                185
His Leu Lys Gln Lys Gly Ile Arg Val Met Leu Gly His Ser Ala Ala
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Thr Tyr Ala Gln Thr Leu Ala Ala Phe Asp Ala Gly Ala Asp Gly Leu
                        215
                                            220
Val His Cys Tyr Asn Gly Met Thr Gly Leu His His Arg Glu Pro Gly
                    230
                                        235
Met Val Gly Ala Gly Leu Thr Asp Pro Arg Ala Trp Leu Glu Leu Ile
                                    250
                245
Ala Asp Gly His His Val His Pro Gly Ala Met Arg Leu Cys Cys Cys
            260
                                265
                                                    270
Cys Ala Lys Asp Arg Thr Val Leu Ile Thr Asp Ala Met Gln Ala Ala
        275
                            280
                                                285
Gly Met Pro Asp Gly Gly Tyr Thr Leu Cys Gly Glu Ser Val Glu Met
                        295
                                            300
Gln Gly Gly Val Val Arg Thr Ala Ser Gly Gly Leu Ala Gly Ser Thr
                    310
                                        315
Leu Ala Leu Asp Ala Ala Val Arg Asn Met Val Glu His Thr Gly Val
                325
                                    330
Ala Pro Glu Asn Ala Ile His Met Ala Ser Leu His Pro Ala Arg Leu
            340
                                345
Leu Gly Met Asp His Leu Leu Gly Ser Leu Ala Pro Gly Lys Arg Ala
        355
                            360
                                                365
Asn Ile Ile Ala Leu Asp Ala Gly Leu His Leu Arg Gln Ile Trp Ile
                        375
                                            380
Gln Gly Gln Ala Leu Ser Leu
385
                    390
<210> 9745
<211> 382
<212> PRT
<213> Enterobacter cloacae
<400> 9745
Val Met Pro Gln Thr Thr Thr Thr Gly Thr Trp Thr Glu Lys Glu
                                    10
Ile Arg Gln Gln Pro Ala Ser Trp Leu Arg Ser Leu Asn Asn Ile Asp
Asn Leu Arg Ala Ser Ile Asp Ser Phe Leu Thr Pro Leu Leu Arg Lys
Pro Asp Leu Arg Ile Val Leu Thr Gly Ala Gly Thr Ser Ala Phe Ile
Gly Asp Ile Ile Ala Pro Trp Leu Ala Ser His Thr Arg Lys Asn Ile
                                        75
Thr Ala Ile Pro Thr Thr Asp Leu Val Thr Asn Pro Met Asp Tyr Phe
Ser Pro Ala His Pro Leu Leu Val Ser Phe Ala Arg Ser Gly Asn
                                105
            100
Ser Pro Glu Ser Val Ala Ala Val Glu Leu Ala Asn Gln Phe Val Pro
                            120
                                                125
        115
Glu Cys Tyr His Leu Ser Ile Thr Cys Asn Glu Ala Gly Ser Leu Tyr
                        135
                                            140
Gln Asn Ala Val Asp Ser Asp Asn Ala Cys Ala Leu Leu Met Pro Ala
                    150
                                        155
Glu Thr His Asp Arg Gly Phe Ala Met Thr Ser Ser Ile Thr Thr Met
                                    170
               165
Met Ala Ser Cys Leu Ala Val Phe Ala Pro Glu Thr Ile Asn Ser Lys
            180
                                185
Thr Phe Arg Asp Val Ser Asp Arg Cys Gln Ala Ile Leu Thr Ser Leu
                            200
                                                205
Gly Asp Phe Ser Pro Gly Val Phe Gly Asn Glu Pro Trp Lys Arg Ile
                        215
                                            220
Val Tyr Leu Gly Ser Gly Gly Leu Gln Gly Ala Ala Arg Glu Ser Ala
                    230
                                        235
```

Leu Lys Val Leu Glu Leu Thr Ala Gly Lys Leu Ala Ala Phe Tyr Asp 245 250 Ser Pro Thr Gly Phe Arg His Gly Pro Lys Ser Leu Val Asp Asn Glu 265 270 Thr Leu Val Val Phe Val Ser Ser His Pro Tyr Thr Arg Gln Tyr 280 Asp Leu Asp Leu Leu Ala Glu Leu Arg Arg Asp Arg Gln Ala Met Arg 295 300 Val Val Ala Ile Ala Ala Glu Thr Asp Pro Val Ile Glu Ala Gly Pro 310 315 His Ile Leu Leu Pro Pro Ser Arg Ser Phe Asn Asp Met Glu Gln Ala 325 330 Phe Cys Phe Leu Met Tyr Ala Gln Val Phe Ala Leu Thr Gln Ser Leu 340 345 His Val Gly Asn Thr Pro Asp Thr Pro Ser Ala Ser Gly Thr Val Asn 355 360 365 Arg Val Val Gln Gly Val Val Ile His Pro Trp Gln Ala 375 370

<210> 9746

<211> 295

<212> PRT

<213> Enterobacter cloacae

<400> 9746 Glu Asp Arg Leu Met Ser Ile Ile Ser Thr Lys Tyr Leu Leu Gln Asp 10 Ala Gln Ala Lys Gly Phe Ala Val Pro Ala Phe Asn Ile His Asn Ala 20 Glu Thr Ile Gln Ala Ile Leu Glu Val Cys Ser Glu Met Arg Ser Pro Val Ile Leu Ala Gly Thr Pro Gly Thr Phe Lys His Ile Ala Leu Glu Glu Ile Tyr Ala Leu Cys Ser Ala Tyr Ser Leu Thr Tyr Asp Met Pro 70 75 Leu Ala Leu His Leu Asp His His Glu Ser Leu Asp Asp Ile Arg Arg 90 Lys Val His Ala Gly Val Arg Ser Ala Met Ile Asp Gly Ser His Tyr 100 105 Pro Phe Glu Gln Asn Val Lys Leu Val Lys Ser Val Val Asp Phe Cys 120 His Leu Asn Asp Cys Ser Val Glu Ala Glu Leu Gly Arg Leu Gly Gly 135 140 Val Glu Asp Asp Met Ser Val Asp Ala Glu Ser Ala Phe Leu Thr Asp 150 155 Pro Gln Glu Ala Lys Arg Phe Val Glu Leu Thr Gly Val Asp Ser Leu 165 170 Ala Val Ala Ile Gly Thr Ala His Gly Leu Tyr Thr Lys Arg Pro Lys 180 185 190 Ile Asp Phe Gln Arg Leu Ala Glu Ile Arg Glu Val Met Thr Val Pro 200 205 Leu Val Leu His Gly Ala Ser Asp Val Pro Asp Glu Asp Val Arg Arg 215 220 Thr Ile Glu Leu Gly Val Cys Lys Val Asn Val Ala Thr Glu Leu Lys 230 235 Ile Ala Phe Ser Asp Ala Val Lys Ala Trp Phe Ala Glu Asn Pro Gln 245 250 Gly Asn Asp Pro Arg Phe Tyr Met Arg Val Gly Met Asp Ala Met Lys 265 Glu Val Val Arg Ser Lys Ile Thr Val Cys Gly Ser Ala Asn Arg Leu 280

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Leu Leu Pro Ala Glu Ala
    290
                        295
<210> 9747
<211> 182
<212> PRT
<213> Enterobacter cloacae
<400> 9747
Arg Arg Val Leu Lys Pro Asp Ser Ala Phe His Tyr Pro Lys Asn Pro
Arg Ser Pro Tyr Met Thr Gln Glu Lys Ser Phe Lys Ser Lys Ala Trp
                                25
            20
Glu Phe Phe Gln Ser Leu Gly Lys Thr Phe Met Phe Pro Val Ser Leu
                            40
Leu Ala Phe Met Gly Leu Leu Gly Ile Gly Ser Ser Val Thr Ser
Pro Ser Thr Ile Lys Ser Phe Pro Phe Leu Gly Gly Glu Leu Thr Gln
                    70
                                        75
Leu Thr Phe Gly Phe Ile Ala Met Val Gly Gly Phe Ala Phe Thr Tyr
                85
                                    90
Leu Pro Leu Met Phe Ala Met Ala Ile Pro Met Gly Leu Ala Arg Arg
            100
                                105
                                                    110
Asn Lys Ala Val Gly Ala Phe Ala Gly Phe Val Gly Tyr Met Leu Met
                            120
                                                125
Asn Met Ser Ile Asn Tyr Tyr Leu Thr Ala Thr His Gln Leu Ala Asp
                        135
Ala Ala Thr Met Arg Gln Val Gly Gln Ser Ile Val Leu Gly Ile Gln
                    150
Thr Leu Glu Met Gly Val Leu Gly Gly Ile Val Val Gly Val Ile Thr
                165
                                    170
Tyr Phe Leu His Glu Asn
            180
<210> 9748
<211> 179
<212> PRT
<213> Enterobacter cloacae
<400> 9748
Val Tyr Pro Phe Ser His Tyr Phe Gly Val Leu Met Asn Gln Leu Thr
                                    10
Tyr Leu Gln Gly Tyr Pro Glu His Leu Leu Ser Gln Val Arg Asp Leu
                                25
Ile Ala Ala Gly Lys Leu Gly Ala Val Leu Glu Lys Arg Tyr Pro Gly
                            40
Thr His Asp Phe Ala Thr Asp Lys Ala Leu Trp Gln Tyr Thr Gln Asp
                        55
Leu Lys Asn Gln Tyr Leu Lys Ser Ala Pro Pro Ile Asn Lys Val Met
                    70
                                        75
Tyr Asp Asn Lys Ile His Val Leu Lys Asn Ala Leu Gly Leu His Thr
                85
                                    90
Ala Ile Ser Arg Val Gln Gly Gly Lys Leu Lys Ala Lys Ala Glu Ile
            100
                                105
                                                    110
Arg Val Ala Thr Val Phe Arg Asn Ala Pro Glu Ala Phe Leu Arg Met
                            120
                                               125
Ile Val Val His Glu Leu Ala His Leu Lys Glu Lys Glu His Asp Lys
                       135
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Ala Phe Tyr Ser Leu Cys Cys His Met Glu Pro Gln Tyr His Gln Leu

Glu Phe Asp Thr Arg Leu Trp Leu Thr His Leu Ser Leu Lys Ser Asn

155

170

165

<210> 9749

A THE RESIDENCE OF SECTION AND SECTION AND SECTION OF SECTION AND SECTION OF

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<211> 333
<212> PRT
<213> Enterobacter cloacae
<400> 9749
Pro Phe Leu Phe Phe Met Cys Lys Glu Asn Ser Met His Ser Val Gly
Thr Pro Met Leu Trp Gly Gly Phe Ala Val Val Leu Ile Met Leu
                                25
Ala Ile Asp Leu Phe Leu Gln Gly Arg Arg Gly Glu His Gly Met Ser
                            40
Val Lys Gln Ala Ala Val Trp Ser Leu Val Trp Val Thr Leu Ser Leu
   50
                        55
Leu Phe Cys Ala Ala Phe Trp Trp Tyr Leu Ala Ser Thr Glu Gly Arg
                    70
Ala Val Ala Asp Pro Gln Ala Leu Ala Phe Leu Thr Gly Tyr Leu Ile
Glu Lys Ala Leu Ala Val Asp Asn Val Phe Val Trp Leu Met Leu Phe
                                105
Ser Tyr Phe Ala Val Pro Ala Ala Leu Gln Arg Arg Val Leu Val Tyr
                            120
Gly Val Leu Gly Ala Ile Val Leu Arg Thr Ile Met Ile Phe Ala Gly
                        135
Ser Trp Leu Ile Thr Gln Phe Glu Trp Leu Leu Tyr Val Phe Gly Ala
                    150
Phe Leu Leu Phe Thr Gly Val Lys Met Ala Leu Ala Lys Glu Asp Asp
                165
                                    170
Thr Gly Ile Gly Asp Lys Pro Leu Val Lys Trp Phe Arg Gly His Leu
           180
                                185
Arg Met Thr Asp Lys Ile Glu Ser Glu His Phe Phe Val Arg Lys Asn
                            200
Gly Leu Leu Phe Ala Thr Pro Leu Leu Val Leu Ile Leu Val Glu
                        215
                                            220
Leu Ser Asp Val Ile Phe Ala Val Asp Ser Ile Pro Ala Ile Phe Ala
                    230
                                        235
Val Thr Thr Asp Pro Phe Ile Val Leu Thr Ser Asn Leu Phe Ala Ile
                                    250
               245
Leu Gly Leu Arg Ala Met Tyr Phe Leu Leu Ala Gly Ala Ala Glu Arg
                                265
Phe Ser Met Leu Lys Tyr Gly Leu Ser Val Ile Leu Val Phe Ile Gly
                            280
Ile Lys Met Leu Ile Val Asp Phe Tyr His Ile Pro Ile Ala Ile Ser
                       295
                                           300
Leu Gly Val Val Phe Gly Ile Leu Leu Val Thr Leu Ile Ile Asn Thr
                                       315
                   310
Trp Val Asn Arg Gln His Asp Lys Lys Gln Gln Val
               325
<210> 9750
<211> 270
<212> PRT
<213> Enterobacter cloacae
<400> 9750
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Gln Ile Ile Arg Arg Thr Leu Pro Gly Ala His Met Glu Ile Thr Glu

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Ser Arg Arg Leu Tyr Gln Gln Leu Ala Ala Glu Leu Lys Asp Arg Ile
                                25
Glu Gln Gly Val Tyr Leu Val Gly Asp Lys Leu Pro Ala Glu Arg Phe
                            40
Ile Ala Asp Glu Lys Ser Val Ser Arg Thr Val Val Arg Glu Ala Ile
                        55
Ile Met Leu Glu Val Glu Gly Tyr Val Glu Val Arg Lys Gly Ser Gly
                                        75
Ile His Val Ile Ser Ser Gln Ala Lys His Ser Pro Thr Pro Asp Glu
Ser Leu Glu Phe Ala Ser Tyr Gly Pro Phe Glu Leu Leu Gln Ala Arg
            100
                                105
Gln Leu Ile Glu Ser Asn Ile Ala Glu Phe Ala Ala Thr Gln Val Thr
                            120
                                                125
Lys Gln Asp Ile Met Lys Leu Met Glu Ile Gln Asp His Ala Arg Lys
                        135
                                            140
Glu Lys Cys Phe Arg Asp Ser Glu Trp Asp Leu Gln Phe His Val Gln
                    150
                                        155
Val Ala Leu Ala Thr Gin Asn Thr Ala Leu Ala Ala Ile Val Glu Lys
                165
                                    170
Met Trp Thr Gln Arg Val His Asn Pro Tyr Trp Lys Lys Leu His Asp
            180
                                185
His Ile Asp Ser Arg Thr Val Asp Asn Trp Cys Asp Asp His Asp Gln
        195
                            200
                                                205
Ile Leu Lys Ala Leu Ile Arg Lys Asp Pro His Ala Ala Lys Leu Ala
                        215
                                            220
Met Trp Gln His Leu Glu Asn Thr Lys Gln Met Leu Phe Asn Glu Thr
                    230
                                        235
Ser Asp Asp Phe Glu Phe Asn Ala Asp Arg Tyr Leu Phe Ala Asp Asn
                245
                                    250
Pro Val Val His Leu Asp Thr Ala Thr Asn Leu Ala Lys
            260
                                265
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<210> 9751

<211> 221

<212> PRT

<213> Enterobacter cloacae

<400> 9751

Met Glu Leu Thr Gln Leu Leu Asn Ala Leu Trp Ala Gln Asp Phe Glu Thr Leu Ala Asn Pro Ser Met Ile Gly Met Leu Tyr Phe Val Leu Phe Met Ile Leu Phe Leu Glu Asn Gly Leu Leu Pro Ala Ala Phe Leu Pro Gly Asp Ser Leu Leu Val Leu Val Gly Val Leu Cys Ala Lys Gly 55 Ala Met Ala Phe Pro Gln Thr Val Leu Leu Thr Ile Ala Ala Ser 70 75 Leu Gly Cys Trp Val Ser Tyr Ile Gln Gly Arg Trp Leu Gly Asn Thr 90 Arg Ile Val Gln Asn Trp Leu Ser His Leu Pro Ala His Tyr His Gln 100 105 110 Arg Ala His His Leu Phe His Lys His Gly Leu Ser Ala Leu Leu Ile 120 125 Gly Arg Phe Ile Ala Phe Val Arg Thr Leu Leu Pro Thr Ile Ala Gly 135 140 Leu Ser Gly Leu Ser Ser Thr Arg Phe Gln Phe Phe Asn Trp Met Ser 150 155 Gly Leu Leu Trp Val Leu Ile Leu Thr Thr Leu Gly Tyr Ala Leu Gly 165 170

Lys Thr Pro Val Phe Met Lys Tyr Glu Asp Gln Leu Met Ser Cys Leu 180 185 Met Leu Leu Pro Val Val Leu Leu Val Phe Gly Leu Val Gly Ser Leu 200 Val Val Leu Trp Lys Lys Lys Tyr Gly Ala Arg Gly 215 <210> 9752 <211> 110 <212> PRT <213> Enterobacter cloacae <400> 9752 Arg Lys Ser Gln Gln Glu Arg Ile Met Ser Lys Asp Thr Thr Ser Glu 10 Asn Leu Arg Ala Glu Leu Lys Ser Leu Ala Asp Thr Leu Glu Glu Val 20 Leu Asn Ser Ser Ala Asp Lys Ser Lys Glu Glu Val Ser Lys Leu Arg 40 Ser Lys Ala Glu Gln Ala Leu Lys Glu Ser Arg Tyr Arg Leu Gly Glu 50 60 Thr Gly Asp Ala Leu Ala Lys Gln Thr Arg Glu Ala Ala Ala Arg Ala 70 Asp Glu Tyr Val Arg Asp Asn Pro Trp Thr Gly Val Gly Ile Gly Ala 85 90 Ala Val Gly Val Val Leu Gly Val Leu Leu Thr Arg Arg 100 110 <210> 9753 <211> 129 <212> PRT <213> Enterobacter cloacae <400> 9753 Leu Ile Lys Arg Gln Gly Lys Met Asp Trp Tyr Leu Lys Val Leu Arg Asn Tyr Phe Gly Phe Gly Gly Arg Ala Arg Arg Lys Glu Tyr Trp Met Phe Val Leu Val Asn Phe Val Leu Ile Met Val Leu Gly Ile Val Asp Lys Ile Leu Gly Trp Glu Arg Glu Gly Glu Gly Ile Leu Thr Thr 55 Ile Tyr Gly Val Leu Val Leu Pro Ser Trp Ala Val Leu Phe Arg 70 75 Arg Leu His Asp Thr Asp Arg Ser Ala Trp Trp Leu Leu Leu Leu 8.5 90 Ile Pro Leu Ile Gly Trp Ile Val Ile Leu Ile Phe Asn Cys Gln Ser · 105 110 Gly Thr Pro Gly Glu Asn Arg Phe Gly Pro Asp Pro Lys Ala Ser Ala 120 125 <210> 9754 <211> 288

<400> 9754

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

Arg Arg Pro Glu Trp Asn Ala Ser Phe Arg Ala Phe Gln Gln Arg Leu 1 5 10 15

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Leu Trp Ile Ser Leu Asn Cys Ser Glu Gly Phe Thr Met Glu Ile Ser
                                25
Leu Leu Gln Ala Phe Ala Leu Gly Leu Leu Ala Phe Ile Ala Gly Leu
                            40
Asp Met Phe Asn Gly Leu Thr His Met His Arg Pro Val Val Leu Gly
                        55
Pro Leu Val Gly Leu Ile Leu Gly Asp Leu His Thr Gly Ile Leu Thr
                    70
                                        75
Gly Gly Thr Leu Glu Leu Val Trp Met Gly Leu Ala Pro Leu Ala Gly
                85
                                    90
Ala Gln Pro Pro Asn Val Ile Ile Gly Thr Ile Val Gly Thr Thr Phe
                                105
            100
Ala Ile Thr Thr Gly Val Lys Pro Asp Val Ala Val Gly Val Ala Val
                            120
                                                125
Pro Phe Ala Val Ala Val Gln Met Gly Ile Thr Phe Leu Phe Ser Val
                        135
                                             140
Met Ser Gly Val Met Ser Arg Cys Asp Arg Met Ala Ala Asn Ala Asp
                    150
                                        155
Thr Arg Gly Ile Glu Arg Val Asn Tyr Leu Ala Leu Leu Ala Leu Gly
                165
                                    170
Val Phe Tyr Phe Leu Cys Ala Phe Leu Pro Ile Tyr Phe Gly Ala Glu
            180
                                185
                                                     190
His Ala Lys Thr Ala Ile Asp Val Leu Pro Glu Arg Leu Ile Asp Gly
                            200
Leu Gly Val Ala Gly Gly Ile Met Pro Ala Ile Gly Phe Ala Val Leu
                        215
                                             220
Leu Lys Ile Met Met Lys Asn Val Tyr Ile Pro Tyr Phe Ile Ile Gly
                    230
                                        235
Phe Val Ala Ala Ala Trp Leu Lys Leu Pro Val Leu Ala Ile Ala Ala
                                    250
Ala Ala Leu Ala Met Ala Leu Ile Asp Leu Leu Arg Lys Ser Pro Glu
                                265
Pro Thr Ala Pro Ala Ala Gln Lys Glu Glu Phe Glu Asp Gly Ile
                            280
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<210> 9755
<211> 157
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<212> PRT

<213> Enterobacter cloacae

<400> 9755

Ile Leu Ser Leu Pro Val Lys Ser Lys Glu Val Ala Met Leu Gly Ile Ile Leu Thr Gly His Gly Gly Phe Ala Ser Gly Leu Gln Gln Ala Met 25 Lys Gln Ile Leu Gly Glu Gln Pro Gln Phe Ile Ala Ile Asp Phe Pro 40 Glu Ser Ser Thr Thr Ala Arg Leu Thr Ala Gln Leu Glu Gln Ala Val 55 Asn Glu Leu Asp Ala Glu His Asp Ile Val Phe Leu Thr Asp Leu Leu 75 Gly Gly Thr Pro Phe Arg Val Ala Ser Thr Leu Ala Met Gln Arg Pro 85 90 Gly Ser Glu Val Ile Thr Gly Thr Asn Leu Gln Leu Leu Glu Met 105 Val Leu Glu Arg Asp Gly Leu Ser Ser Glu Ala Phe Arg Leu Gln Ala 120 125 Leu Glu Cys Gly His Arg Gly Leu Thr Ser Leu Val Asp Glu Leu Ala 135 Arg Cys Arg Glu Glu Ala Pro Ala Glu Glu Gly Ile 150

<210> 9756 <211> 614 <212> PRT <213> Enterobacter cloacae <400> 9756 Arg Glu Ala Arg Leu Asn Ser His His Gly Pro Phe Ala Met Val Asn 10 Asn Met Thr Asp Leu Thr Ala Gln Glu Ala Ala Trp Gln Thr Arg Asp 25 His Leu Asp Asp Pro Val Ile Gly Glu Leu Arg Asn Arg Phe Gly Pro 40 Asp Ala Phe Thr Val Gln Ala Thr Arg Thr Gly Val Pro Val Val Trp 55 Val Lys Arg Glu Gln Leu Leu Glu Val Val Asp Phe Leu Lys Lys Leu 75 70 Pro Lys Pro Tyr Val Met Leu Phe Asp Leu His Gly Met Asp Glu Arg 85 90 Leu Arg Thr His Arg Gln Gly Leu Pro Ala Ala Asp Phe Ser Val Phe 100 105 Tyr His Leu Ile Ser Ile Asp Arg Asn Thr Asp Ile Met Leu Lys Val 120 Ala Leu Ser Glu Asn Asp Met His Leu Pro Thr Ile Thr Lys Leu Phe 135 140 Pro Asn Ala Asn Trp Tyr Glu Arg Glu Thr Trp Glu Met Phe Gly Met 150 155 Thr Phe Asp Gly His Pro His Leu Thr Arg Ile Met Met Pro Gln Thr 165 170 Trp Thr Gly His Pro Leu Arg Lys Asp Tyr Pro Ala Arg Ala Thr Glu 185 180 Phe Asp Pro Phe Glu Leu Thr Lys Ala Lys Gln Asp Leu Glu Met Glu 200 Ala Leu Thr Phe Lys Pro Glu Asp Trp Gly Met Lys Arg Gly Thr Glu 215 Asn Glu Asp Phe Met Phe Leu Asn Leu Gly Pro Asn His Pro Ser Ala 230 235 His Gly Ala Phe Arg Ile Ile Leu Gln Leu Asp Gly Glu Glu Ile Val 245 250 Asp Cys Val Pro Asp Ile Gly Tyr His His Arg Gly Ala Glu Lys Met 265 Gly Glu Arg Gln Ser Trp His Ser Tyr Ile Pro Tyr Thr Asp Arg Ile 280 285 Glu Tyr Leu Gly Gly Cys Val Asn Glu Met Pro Tyr Val Leu Ala Val 300 295 Glu Lys Leu Ala Gly Ile Thr Val Pro Asp Arg Val Asn Val Ile Arg 310 315 Val Met Leu Ser Glu Leu Phe Arg Ile Asn Ser His Leu Leu Tyr Ile 325 330 Ser Thr Phe Ile Gln Asp Val Gly Ala Met Thr Pro Val Phe Phe Ala 340 345 Phe Thr Asp Arg Gln Lys Ile Tyr Asp Leu Val Glu Ala Ile Thr Gly 360 365 Phe Arg Met His Pro Ala Trp Phe Arg Ile Gly Gly Val Ala His Asp 375 380 Leu Pro Arg Gly Trp Asp Arg Leu Leu Arg Glu Phe Leu Asp Trp Met 390 395 Pro Lys Arg Leu Ala Ser Tyr Glu Lys Ala Ala Leu Arg Asn Ser Ile 410 Leu Lys Gly Arg Ser Gln Gly Val Ala Ala Tyr Gly Ala Lys Glu Ala

425

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Leu Glu Trp Gly Thr Thr Gly Ala Gly Leu Arg Ala Thr Gly Ile Asp
                            440
Phe Asp Val Arg Lys Ala Arg Pro Tyr Ser Gly Tyr Glu Asn Phe Asp
                        455
Phe Glu Val Pro Val Gly Gly Gly Val Ser Asp Cys Tyr Thr Arg Val
                    470
                                        475
Met Leu Lys Val Glu Glu Leu Arg Gln Ser Leu Arg Ile Leu Glu Gln
                485
                                    490
Cys Leu Asn Asn Met Pro Glu Gly Pro Phe Lys Ala Asp His Pro Leu
            500
                                505
Thr Thr Pro Pro Pro Lys Glu Arg Thr Leu Gln His Ile Glu Thr Leu
                            520
                                                 525
        515
Ile Thr His Phe Leu Gln Val Ser Trp Gly Pro Val Met Pro Ala Gln
                        535
                                            540
Glu Ser Phe Gln Met Ile Glu Ala Thr Lys Gly Ile Asn Ser Tyr Tyr
                    550
                                        555
Leu Thr Ser Asp Gly Ser Thr Met Ser Tyr Arg Thr Arg Val Arg Thr
                                    570
                                                         575
                565
Pro Ser Phe Ala His Leu Gln Gln Ile Pro Ala Ala Ile Arg Gly Ser
            580
                                585
                                                     590
Leu Val Ser Asp Leu Ile Val Tyr Leu Gly Ser Ile Asp Phe Val Met
        595
                            600
                                                 605
Ser Asp Val Asp Arg
   610
<210> 9757
<211> 332
<212> PRT
<213> Enterobacter cloacae
<400> 9757
Pro Ser Gly Gly Lys Ser Met Ser Trp Leu Thr Pro Asp Leu Ile Asp
                                    10
Ile Leu Leu Ser Ile Leu Lys Ala Val Val Ile Leu Leu Val Val Val
Thr Cys Gly Ala Phe Met Ser Phe Gly Glu Arg Arg Leu Leu Gly Leu
Phe Gln Asn Arg Tyr Gly Pro Asn Arg Val Gly Trp Gly Gly Ser Leu
Gln Leu Val Ala Asp Met Ile Lys Met Phe Phe Lys Glu Asp Trp Val
Pro Arg Phe Ser Asp Arg Val Ile Phe Thr Leu Ala Pro Met Ile Ala
Phe Thr Ser Leu Leu Leu Ala Phe Ala Ile Val Pro Val Ser Pro Thr
            100
                                105
Trp Val Val Ala Asp Leu Asn Ile Gly Ile Leu Phe Phe Leu Met Met
                            120
                                                125
Ala Gly Leu Ala Val Tyr Ala Val Leu Phe Ala Gly Trp Ser Ser Asn
                        135
                                            140
Asn Lys Tyr Ser Leu Leu Gly Ala Met Arg Ala Ser Ala Gln Thr Leu
                    150
                                        155
Ser Tyr Glu Val Phe Leu Gly Leu Ser Leu Met Gly Val Val Ala Gln
                165
                                    170
Ala Gly Ser Phe Asn Met Thr Asp Ile Val Asn Asn Gln Ala Asp Ile
                                185
Trp Asn Val Ile Pro Gln Phe Phe Gly Phe Ile Thr Phe Ala Ile Ala
                            200
Gly Val Ala Val Cys His Arg His Pro Phe Asp Gln Pro Glu Ala Glu
                        215
                                           220
Gln Glu Leu Ala Asp Gly Tyr His Ile Glu Tyr Ser Gly Met Lys Phe
```

230

Gly Leu Phe Phe Val Gly Glu Tyr Ile Gly Ile Val Thr Ile Ser Ala 245 250 Leu Met Val Thr Leu Phe Phe Gly Gly Trp His Gly Pro Phe Leu Pro 265 Pro Phe Ile Trp Phe Ala Leu Lys Thr Ala Phe Phe Met Met Phe 280 Ile Leu Ile Arg Ala Ala Leu Pro Arg Pro Arg Tyr Asp Gln Val Met 295 300 Ser Phe Gly Trp Lys Val Cys Leu Pro Leu Thr Leu Val Asn Leu Leu 310 315 Val Thr Ala Ala Val Ile Leu Trp Gln Gln Pro 325 <210> 9758 <211> 231 <212> PRT <213> Enterobacter cloacae <400> 9758 Phe Pro Val Arg Ala Asn Thr Arg Asn Ile Thr Ser Thr Gly Trp Arg 10 15 Val Trp Gln Ser Thr Ala Lys Ile Arg Ala Lys Gln Arg Thr Lys Pro 20 Ser Leu Ser Thr Ser Arg Ala Cys Tyr Arg Lys Glu Arg Ala Met Glu 40 Phe Ala Phe Tyr Ile Cys Gly Leu Ile Ala Ile Leu Ala Thr Leu Arg 55 60 Val Ile Thr His Thr Asn Pro Val His Ala Leu Leu Tyr Leu Ile Ile 70 75 Ser Leu Leu Ala Ile Ser Gly Val Phe Phe Ala Leu Gly Ala His Phe 90 Ala Gly Ala Leu Glu Ile Ile Val Tyr Ala Gly Ala Ile Met Val Leu 105 Phe Val Phe Val Val Met Met Leu Asn Leu Gly Gly Ser Glu Ile Glu 120 Gln Glu Arg Gln Trp Leu Lys Pro Gln Val Trp Ile Gly Pro Ala Ile 135 Leu Ser Ala Ile Met Leu Ala Val Ile Val Tyr Ala Ile Leu Gly Val 150 155 Asn Asp Gln Gly Ile Asp Gly Thr Pro Ile Ser Ala Lys Ala Val Gly 170 165 Ile Thr Leu Phe Gly Pro Tyr Val Leu Ala Val Glu Leu Ala Ser Met 190 185 Leu Leu Leu Ala Gly Leu Val Val Ala Phe His Val Gly Arg Glu Glu 195 200 205 Arg Val Gly Glu Val Leu Ser Asn Arg Thr Asp Asp Arg Ala Lys Arg 215 Lys Thr Glu Glu Arg Ala <210> 9759 <211> 437 <212> PRT <213> Enterobacter cloacae <400> 9759 Gln Gly Glu Val Arg Val His Ser Ile Phe Leu Ala Leu Gln Ser Leu 10 Arg Thr Gln Leu Ala Gln Ala Leu Pro Ala Ile Pro Gly Leu Arg His 25

Phe Asp Val Ser Phe Pro Leu Asn Asp Ala Phe Asp Pro Leu Ala Trp

40 Leu Gly Val Gln Arg Cys Tyr Pro Gln Phe Tyr Trp Gln Gln Arg Ser 55 60 Gly Asp Glu Glu Leu Ala Ala Leu Gly Ser Leu Ala Gln Phe Asp Ser 70 75 Leu Ala Ser Ala Ser Arg Phe Leu His Ala His Asp Val Ala Asn Asp 90 85 Thr Arg Ile Cys Gly Leu Asn Ala Phe Asn Pro Ala Gln Gly Lys Leu 105 Phe Leu Pro Arg Leu Leu Trp Arg Arg Ser Gly Gly Val Ala Thr Leu 120 Arg Leu Gln Leu Trp Ser Glu Thr Ser Leu Arg Glu Asp Ala Arg Glu 135 140 Ala Leu Asn Phe Val Asp Asn Leu Arg Asp Ala Ala Pro Ile Arg Pro 150 155 Leu Ser Val Gln Ile Val Gln Glu Thr His His Pro Glu Lys Pro Asp 170 165 Trp Leu Ala Leu Ile Arg Gln Ala Thr Asp Thr Leu Ala Arg Gly Asp 185 180 Phe Glu Lys Val Val Leu Ala Arg Ala Thr Asp Val Gln Cys Gln Gln 195 200 205 Pro Val Asn Ala Ile Ala Leu Met Ala Ala Ser Arg Ala Leu Asn Leu 215 220 Asn Cys Tyr His Phe Cys Met Val Phe Asp Ala Ser Asn Ala Phe Leu 230 235 Gly Ser Thr Pro Glu Arg Leu Trp Arg Arg Arg Gly Thr Leu Leu Arg 245 250 Thr Glu Ala Leu Ala Gly Thr Val Ala Ser His Ser Asp Asp Lys Gln 265 270 Ala Gln Arg Leu Gly Asp Trp Leu Met Asn Asp Asp Lys Asn Gln Arg 275 280 Glu Asn Met Leu Val Val Glu Asp Ile Cys Gln Arg Leu Gln His His 295 300 Thr Arg Thr Leu Glu Ile Leu Pro Ala Gln Val Leu Arg Leu Arg Lys 315 Val Gln His Leu Arg Arg Cys Ile Trp Thr Glu Leu Lys Gln Pro Asp 330 Asp Glu Gln Cys Leu His Ile Leu Gln Pro Thr Ala Ala Val Ala Gly 345 Leu Pro Arg Gln Ala Ala Arg Glu Phe Ile Ala Lys Val Glu Pro Phe 360 Asp Arg Glu Trp Tyr Ala Gly Ser Ala Gly Tyr Leu Ser Arg Asp Gln 375 380 Ser Glu Phe Cys Val Ala Leu Arg Ser Ala Arg Val His Asn Ala Ala 390 395 Leu Arg Leu Tyr Ala Gly Ala Gly Ile Val Ser Gly Ser Asp Pro Glu 410 Gln Glu Trp Gln Glu Ile Glu Asn Lys Ala Ala Gly Leu Arg Ser Leu 420 425 Leu Leu Arg Asp 435

<210> 9760

<211> 274

<212> PRT

<213> Enterobacter cloacae

<400> 9760

Arg Arg Ala Glu Ala Ala Thr Ser Ala Cys Ala Gly Glu Ser Pro Val

5 10 15

Ile Leu Ala Gly Val Ser Gln Pro Gly Asn Pro Gly Tyr Pro Trp Leu



			20					25					30		
Val	Phe	Leu 35	His	Gly	Phe	Ser	Gly 40	Asp	Cys	Arg	Glu	Trp 45	Gln	Ala	Val
Gly	Ala 50	Ser	Leu	His	Asp	Tyr 55	Pro	Arg	Leu	Tyr	Ile 60	Asp	Leu	Pro	Gly
His 65	Gly	Gly	Ser	Ala	Asp 70	Thr	Gly	Val	Thr	Gly 75	Phe	Ala	Glu	Val	Ser 80
Glu	Leu	Leu	Ser	His 85	Thr	Leu	Val	Ser	Tyr 90	Asn	Ile	Leu	Arg	Tyr 95	Trp
	Val		100					105					110		
Gln	His	Pro 115	Ala	_	Leu	Asp	Gly 120	Val	Ile	Val	Glu	Gly 125	Gly	His	Pro
Gly	Leu 130	Gln	Asp	Ala	Asp	Ala 135	Arg	Gln	Ala	Arg	Leu 140	Ile	Ser	Asp	Arg
Arg 145	Trp	Ala	Ser	Arg	Phe 150	Arg	Ser	Glu	Pro	Leu 155	Glu	Ala	Val	Phe	Ala 160
Asp	Trp	Tyr	Gln	Gln 165	Pro	Val	Phe	Ala	Ser 170	Leu	Thr	Asp	Asp	Gln 175	Arg
Arg	Ala	Leu	Ile 180	Ala	Leu	Arg	Ser	Arg 185	Asn	Asn	Gly	Pro	Arg 190	Leu	Ala
Glu	Met	Leu 195	Glu	Ala	Thr	Ser	Leu 200	Ala	Val	Gln	Pro	Asp 205	Leu	Arg	Pro
Ala	Leu 210	Ile	Ala	Arg	Asp	Phe 215	Ser	Phe	Asp	Tyr	Leu 220	Tyr	Gly	Glu	Arg
Asp 225	Gly	Lys	Phe	Ala	Ala 230	Ile	Ala	Thr	Glu	Leu 235	Asn	Ala	Thr	Arg	His 240
Ala	Ile	Pro	His	Ala 245	Gly	His	Asn	Ala	His 250	Arg	Asp	Asn	Pro	Glu 255	Ala
Val	Ala	Ala	Ser 260	Leu	Ala	Gln	Ile	Leu 265	Arg	Tyr	Arg	Thr	Lys 270	Asp	Thr
Leu															

<210> 9761

<211> 539

<212> PRT

<213> Enterobacter cloacae

<400> 9761

Ala Asn Ala Asp Arg Gln Pro Arg Gln Gly Ala Arg Ala Gly Cys Gly 10 Gly Pro Cys Arg Arg Ala Asp Gly Gly Asp Gln Phe Ile His Arg Ile 25 Gln Pro Arg Pro Asp Ala Ala Gly Ala His Arg Cys Met Val Asn Ala 40 45 Gly His Arg Ser Arg Ser Arg Tyr Ala Lys Pro Asp Ala Gly Pro Ala 55 Asp Ser Pro Val Ala Trp Gln His Leu Ala Val Pro Arg Arg Gly 75 70 Ala Gly Ala Ile Ala Met Ser Phe Thr Asp Trp Pro Trp Arg His Trp 85 90 Arg Thr Arg Arg Ala Asp Lys Pro Ala Leu Arg Leu Asp Asp Val Thr 100 105 110 Leu Ser Trp Thr Gln Leu Gly Lys Arg Ile Asp Arg Leu Ala Ala Gly 120 125 Phe Gln Ser Gln Gly Val Ala Asp Gly Asp Gly Val Met Leu Leu Ala 135 140 His Asn His Pro Gln Thr Leu Leu Ala Trp Leu Ala Leu Leu Gln Cys 150 155

Gly Ala Arg Ile Leu Pro Val Asn Pro Gln Leu Pro Arg Pro Leu Leu

```
165
                                    170
Asp Val Leu Leu Pro Gln Met Thr Leu Arg Phe Ala Leu Val Leu Asn
                                185
Gly Glu Tyr Asp Gly Leu Pro Ala Leu Ala Leu Arg Glu Gly Glu Gly
                            200
        195
Gln Gly Gly Val Thr Trp Arg Ala Glu Arg Leu Ala Ser Met Thr Leu
                        215
                                             220
Thr Ser Gly Ser Thr Gly Leu Pro Lys Ala Ala Val His Thr Cys Ala
                    230
                                         235
Ala His Leu Ala Ser Ala Lys Gly Val Leu Ala Leu Met Pro Tyr Gly
                245
                                    250
Asp Ser Asp Asp Trp Leu Leu Ser Leu Pro Leu Phe His Val Ser Gly
                                265
                                                     270
            260
Gln Gly Ile Leu Trp Arg Trp Leu Gln Gly Gly Gly Arg Leu Thr Val
                            280
                                                 285
Arg Glu Lys Gln Pro Leu Glu Gln Ala Leu Gln Gly Cys Thr His Ala
    290
                        295
                                             300
Ser Leu Val Pro Thr Gln Leu Trp Arg Leu Leu Asn Ser His His Pro
                    310
                                         315
Val Ala Leu Lys Ala Val Leu Leu Gly Gly Ala Glu Ile Pro Val Ala
                325
                                    330
Leu Thr Glu Gln Ala Arg Glu Gln Arg Ile Arg Thr Phe Cys Gly Tyr
            340
                                345
Gly Leu Thr Glu Phe Ala Ser Thr Val Cys Ala Lys Glu Ala Asp Gly
                            360
Ala Pro Asp Val Gly Ser Ala Leu Pro Gly Arg Asp Val Gln Val Val
                        375
                                             380
Asn Gly Glu Val Trp Ile Arg Ala Glu Ser Met Ala Ala Gly Tyr Trp
                    390
                                         395
Arg Asp Gly Ala Leu Leu Pro Leu Val Asn Ala Gln Gly Trp Phe Ala
                405
                                     410
Thr Arg Asp Arg Gly Glu Trp His Asp Gly Arg Leu Thr Ile Leu Gly
                                425
            420
Arg Met Asp Asn Leu Phe Phe Ser Gly Gly Glu Gly Ile Gln Pro Glu
                            440
Ala Leu Glu Arq Val Ile Ala Thr His Pro Gln Val Ser Gln Ala Phe
Val Val Pro Leu Asp Asp Ala Glu Tyr Gly Gln Arg Pro Val Ala Val
                    470
                                         475
Val Glu Cys Glu Pro Gly Thr Asp Ile Thr Leu Leu Pro Glu Trp Val
                485
                                     490
Gln Gly Arg Leu Ala Arg Phe Glu Gln Pro Val His Trp Leu Thr Leu
            500
                                505
Pro Ser Glu Leu Lys Asn Gly Gly Ile Lys Ile Ser Arg Gln Ala Leu
                            520
Lys Gln Trp Val Asn Ala Leu Leu Arg Gly
                        535
<210> 9762
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<211> 171

<212> PRT

<213> Enterobacter cloacae

<400> 9762

Asp Arg Glu Gln Thr Asn His His Asp Asp Lys Leu His Ala Val Gly 1 5 10 15 Glu Met Asn Ala Val Glu Gly Lys Thr Ile Asn Pro Gly Val Gly Ile 20 25 30 His Ala Asp Gly Gly Gln Thr Glu Ala Asn Gln Arg Arg Gln Lys Arg 35 40 45 Leu Gln Arg Ile Leu Arg His His Ala Ala Glu Thr Gly Asp Gly Glu

His His Gln Gly Lys Ile Leu Gly Arg Thr Lys Arg Gln Arg Pro Leu 70 75 Gly Gln Arg Arg Gly Glu Glu Asp Asp Ala Ala Asn Gly Asp Gln Gly 85 Ala Lys Glu Arg Ala Asp Gly Gly Asn Arg Glu Arg His Ala Ala Ala 100 105 Ser Leu Leu Arg His Trp Ile Ala Ile Gln Arg Gly His Asn Gly Gly 120 Gly Ile Ala Gly His Val Lys Gln Asn Arg Gly Asn Thr Pro Pro Val 135 Phe Ala Ala Asp Ile Asn Arg Arg Gln Gln Asp Gln Arg Arg Phe Arg 150 155 Arg Gln Val Gln Arg Lys Gly Gln Arg Gln 165

<210> 9763 <211> 243

<212> PRT

<213> Enterobacter cloacae

<400> 9763

Asn Asn Asn Leu Ser Phe Pro Phe His Cys Asp Thr Asn Phe Thr Gly Cys Asp Met Arg Leu Leu Ala Glu Asp Asn Arg Glu Leu Ala His 25 Trp Leu Glu Lys Ala Leu Val Gln Asn Gly Phe Ala Val Asp Cys Val 40 Asn Asp Gly Arg Ala Ala Asp His Leu Leu Gln Gly Glu Asn Tyr Ala 55 Val Ala Ile Leu Asp Ile Gly Met Pro Gly Phe Asp Gly Leu Glu Val 75 Val His Arg Leu Arg Lys Arg Gly Gln Thr Leu Pro Val Leu Phe Leu Thr Ala Arg Ser Asn Val Ala Asp Arg Val Lys Gly Leu Asn Ala Gly 105 Ala Asp Asp Tyr Leu Pro Lys Pro Phe Glu Leu Glu Glu Leu Asp Ala 120 125 Arg Leu Arg Ala Leu Leu Arg Arg Ser Glu Gly Arg Thr Gln Glu Arg 135 140 Gln Arg Leu Gly Glu Leu Glu Tyr Asp Asp Glu Gly Phe Phe Leu Leu 150 155 Arg Asp Glu Pro Leu Ser Leu Thr Pro Arg Glu Leu Ser Leu Lys 170 165 Val Leu Met His Arg Arg Thr Arg Pro Val Ser Arg Gln Gln Leu Phe 180 185 190 Asp Gln Val Phe Ser Leu Asn Asp Asp Val Ser Pro Glu Ser Ile Asp 200 205 Leu Tyr Ile His Arg Leu Arg Lys Lys Leu Thr Gly Ser Gly Val Arg

Ile Thr Thr Leu Arg Gly Leu Gly Tyr Val Leu Glu Cys Gly Asp Glu

220

235

215

230

<210> 9764

<211> 122

225

Val Gly

<212> PRT

<213> Enterobacter cloacae

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5316
Arg Arg Lys Gln Pro Val Met Ile Glu Gly Asp Asp Val Leu Leu Gly
                                     10
Glu Leu Cys Ala Asn Leu Leu Glu Asn Ala Ile Lys Tyr Thr Pro Glu
                                25
Gln Gly Ile Val Thr Val Tyr Leu Arg Thr Ala Asn Asp Ala Val Glu
                            40
Leu Ser Val Glu Asp Ser Gly Pro Gly Ile Ala Glu Asp Gln Ile Ser
                        55
Gln Ala Met Leu Pro Phe His Arg Leu Glu Asn Val Gly Asp Ala Ala
                    70
                                         75
Gly Ser Gly Ile Gly Leu Ala Leu Ala Asn Asp Ile Ala Arg Leu His
                85
                                     90
Arg Ser His Leu Gln Leu Met Pro Ser Glu Asn Leu Gly Gly Leu Ser
                                105
            100
Val Lys Met Arg Phe Leu Met Leu Ile
        115
<210> 9765
<211> 224
<212> PRT
<213> Enterobacter cloacae
<400> 9765
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Met Pro Ile Leu Ser Asn Arg Tyr Lys Leu Ile Ala Cys Arg Thr Trp Ser Pro Leu Ile Thr Gln Ala Gly Arg Leu Lys Ser Arg Gly Phe Trp Thr Ser Leu Asn Lys Leu Cys Gly Ile Thr Thr Met Lys Lys Val Ala 40 Leu Met Gly Leu Ser Gly Leu Met Phe Val Ser Ala Ala Ala Asn Ala 55 Ile Ser Phe Asn Gly Ser Ala Gly Gln Asp Tyr Thr His Leu Gly Phe 70 75 Gly Leu Gly Thr Asp Ser Ala Gly Leu Ala Met Thr Gly Gly Trp Thr 85 90 His Asn Asp Asp Gly Asp Ala Ala Ser Leu Gly Leu Gly Phe Asn 100 105 Val Pro Leu Gly Pro Phe Leu Ala Thr Val Gly Gly Lys Gly Ile Tyr 125 115 120 Thr Asn Pro Asn Asp Gly Asp Glu Gly Tyr Ala Ala Ala Val Gly Gly 135 140 Gly Leu Gln Trp Lys Ile Gly Asp Ser Phe Gly Leu Phe Gly Glu Tyr 150 155 Tyr Tyr Ser Pro Asp Ser Leu Ser Ser Gly Ile Asp Ser Tyr Gln Glu 170 165 Ala Asn Ala Gly Ala Arg Trp Thr Ile Met Arg Pro Ile Thr Ile Glu 180 185 Ala Gly Tyr Arg Tyr Leu Asn Leu Ala Gly Lys Asp Gly Asn Arg Asp 200 205 Asn Ala Leu Ala Asp Gly Pro Tyr Val Gly Val Ser Ala Gly Phe

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<210> 9766
<211> 457
<212> PRT
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<213> Enterobacter cloacae

<400> 9766 Lys Ala Thr Glu Ala Val Me

Lys Ala Thr Glu Ala Val Met Leu Ser Ile Phe Lys Pro Ala Pro His 1 5 10 15 Arg Ala Arg Leu Pro Glu Ala Glu Ile Asp Pro Leu Tyr Arg Arg Leu

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25
Arg Trp Gln Ile Phe Leu Gly Ile Phe Phe Gly Tyr Ala Ala Tyr Tyr
                            40
Leu Val Arg Lys Asn Phe Ala Leu Ala Met Pro Tyr Leu Val Asp Gln
                        55
Gly Phe Ser Arg Gly Asp Leu Gly Phe Ala Leu Ser Gly Ile Ser Ile
                                        75
Ala Tyr Gly Phe Ser Lys Phe Ile Met Gly Ser Val Ser Asp Arg Ser
                                    90
               85
Asn Pro Arg Val Phe Leu Pro Ala Gly Leu Ile Leu Ala Ala Val
            100
                                105
Met Leu Phe Met Gly Phe Val Pro Trp Ala Thr Ser Ser Ile Ala Ile
                            120
                                                125
        115
Met Phe Val Leu Phe Leu Cys Gly Trp Phe Gln Gly Met Gly Trp
                        135
                                            140
Pro Pro Cys Gly Arg Thr Met Val His Trp Trp Ser Gln Lys Glu Arg
                    150
                                        155
Gly Gly Ile Val Ser Val Trp Asn Cys Ala His Asn Val Gly Gly Gly
                                    170
Leu Pro Pro Leu Leu Phe Leu Leu Gly Met Ala Trp Phe Asn Asp Trp
                                185
His Ala Ala Leu Tyr Met Pro Ala Phe Gly Ala Ile Leu Val Ala Ile
                            200
Ile Ala Phe Ala Leu Met Arg Asp Thr Pro Gln Ser Cys Gly Leu Pro
                        215
Pro Ile Glu Glu Tyr Lys Asn Asp Tyr Pro Asp Asp Tyr Ser Glu Lys
                                        235
                    230
His Glu Glu Glu Leu Thr Ala Lys Gln Ile Phe Met Lys Tyr Val Leu
                                    250
Pro Asn Lys Leu Leu Trp Tyr Ile Ala Val Ala Asn Val Phe Val Tyr
Leu Leu Arg Tyr Gly Ile Leu Asp Trp Ser Pro Thr Tyr Leu Lys Glu
        275
                            280
Val Lys His Phe Ala Leu Asp Lys Ser Ser Trp Ala Tyr Phe Leu Tyr
                        295
Glu Tyr Ala Gly Ile Pro Gly Thr Leu Ile Cys Gly Trp Met Ser Asp
                    310
                                        315
Lys Val Phe Lys Gly Asn Arg Gly Ala Thr Gly Val Phe Phe Met Thr
                325
                                    330
Leu Val Thr Ile Ala Thr Val Val Tyr Trp Leu Asn Pro Pro Gly Asn
                                345
Pro Ser Val Asp Met Ala Cys Met Ile Ile Gly Phe Leu Ile Tyr
                            360
Gly Pro Val Met Leu Ile Gly Leu His Ala Leu Glu Leu Ala Pro Lys
                        375
                                            380
Lys Ala Ala Gly Thr Ala Ala Gly Phe Thr Gly Leu Phe Gly Tyr Leu
                   390
                                        395
Gly Gly Ser Val Ala Ala Ser Ala Ile Val Gly Tyr Thr Val Asp Phe
                                    410
               405
Phe Gly Trp Asp Gly Gly Phe Met Val Met Ile Gly Gly Ser Val Leu
                                425
Ala Val Leu Leu Val Val Val Met Ile Gly Glu Lys Arg His His
                            440
Ala Glu Val Leu Ala Arg Arg Gln
    450
```

<sup>&</sup>lt;210> 9767

<sup>&</sup>lt;211> 148

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

5318 <400> 9767 Ala Met Ser Met Ser Thr Ser Thr Glu Val Ile Ala His His Trp Ala 10 Phe Ala Ile Phe Leu Ile Val Ala Ile Gly Leu Cys Cys Leu Met Leu 25 Val Gly Gly Trp Phe Leu Gly Gly Arg Ala Arg Ala Arg His Lys Asn 40 Thr Pro Phe Glu Ser Gly Ile Asp Ser Val Gly Thr Ala Arg Leu Arg Leu Ser Ala Lys Phe Tyr Leu Val Ala Met Phe Phe Val Ile Phe Asp 70 75 Val Glu Ala Leu Tyr Leu Phe Ala Trp Ser Thr Ser Ile Arg Glu Ser 85 Gly Trp Val Gly Phe Val Glu Ala Ala Ile Phe Ile Leu Val Leu Leu 100 105 Ala Gly Leu Val Tyr Leu Val Arg Ile Gly Ala Leu Asp Trp Thr Pro 125 120 Val Arg Ser Arg Arg Glu His Ile Asn Pro Glu Asn Ser Ile Ser Asn 135 130 Arg Gln Gln 145 <210> 9768 <211> 230 <212> PRT <213> Enterobacter cloacae <400> 9768 Gln Arg Gly Asn Lys Met Asp Tyr Thr Leu Thr Arg Ile Asp Pro Asn Gly Glu Asn Asp Arg Tyr Pro Leu Gln Lys Gln Glu Ile Val Thr Asp 20 Pro Leu Glu Gln Glu Val Asn Lys Ser Val Tyr Met Gly Lys Leu Glu 40 His Ala Met His Asp Met Val Asn Trp Gly Arg Lys Asn Ser Ile Trp 55 60 Pro Tyr Asn Phe Gly Leu Ser Cys Cys Tyr Val Glu Met Val Thr Ser 70 Phe Thr Ala Val His Asp Val Ala Arg Phe Gly Ala Glu Val Leu Arg 90 Ala Ser Pro Arg Gln Ala Asp Leu Met Val Val Ala Gly Thr Cys Phe 105 Thr Lys Met Ala Pro Val Ile Gln Arg Leu Tyr Asp Gln Met Leu Glu 120 Pro Lys Trp Val Ile Ser Met Gly Ala Cys Ala Asn Ser Gly Gly Met 135 140 Tyr Asp Ile Tyr Ser Val Val Gln Gly Val Asp Lys Phe Ile Pro Val 150 155 Asp Val Tyr Ile Pro Gly Cys Pro Pro Arg Pro Glu Ala Tyr Met Gln 170 165 Ala Leu Met Leu Leu Gln Glu Ser Ile Gly Lys Glu Arg Arg Pro Leu 185 190 180 Ser Trp Val Val Gly Asp Gln Gly Val Tyr Arg Ala Asn Met Gln Ser 200 Glu Arg Glu Arg Lys Arg Gly Glu Arg Ile Ala Val Thr Asn Leu Arg

215

230

<210> 9769

Thr Pro Asp Glu Ile

<211> 452

<212> PRT <213> Enterobacter cloacae

<400> 9769 Pro Ala Gly Ala Val Gln Met Lys Thr Val Ile Arg Thr Ala Glu Thr 10 His Pro Leu Thr Trp Arg Leu Arg Asp Asp Lys Gln Pro Val Trp Leu 25 Asp Glu Tyr Gln Ser Lys Asn Gly Tyr Ala Gly Ala Arg Lys Ala Leu 40 Gly Gly Met Ala Pro Asp Asp Ile Val Asn Ala Val Lys Glu Ser Gly 55 Leu Lys Gly Arg Gly Gly Ala Gly Phe Ser Thr Gly Leu Lys Trp Ser 70 75 Leu Met Pro Lys Asp Glu Ser Met Asn Ile Arg Tyr Leu Leu Cys Asn 85 90 Ala Asp Glu Met Glu Pro Gly Thr Tyr Lys Asp Arg Leu Leu Met Glu 100 105 Gln Leu Pro His Leu Leu Val Glu Gly Met Leu Ile Ser Ala Phe Ala 120 Leu Lys Ala Tyr Arg Gly Tyr Ile Phe Leu Arg Gly Glu Tyr Ile Glu 130 135 140 Ala Ala Glu Asn Leu Arg Arg Ala Ile Ala Glu Ala Thr Glu Ala Gly 150 155 Leu Leu Gly Lys Asn Ile Leu Gly Thr Gly Phe Asp Phe Glu Leu Phe 165 170 Val His Thr Gly Ala Gly Arg Tyr Ile Cys Gly Glu Glu Thr Ala Leu 180 185 Ile Asn Ser Leu Glu Gly Arg Arg Ala Asn Pro Arg Ser Lys Pro Pro 195 200 Phe Pro Ala Ser Ser Gly Val Trp Gly Lys Pro Thr Cys Val Asn Asn 215 220 Val Glu Thr Leu Cys Asn Val Pro Ala Ile Leu Ala Asn Gly Val Glu 230 235 Trp Tyr Gln Gly Ile Ser Ser Lys Asp Ala Gly Thr Lys Leu Met 250 Gly Phe Ser Gly Arg Val Lys Asn Pro Gly Val Trp Glu Leu Pro Phe 260 265 Gly Thr Thr Ala Arg Glu Ile Leu Glu Asp Tyr Ala Gly Gly Met Arg 280 Asp Gly Leu Lys Phe Lys Ala Trp Gln Pro Gly Gly Ala Gly Thr Asp 295 300 Phe Leu Thr Glu Ala His Leu Asp Leu Pro Met Glu Phe Glu Ser Ile 310 315 Gly Lys Ala Gly Ser Arg Leu Gly Thr Ala Leu Ala Met Ala Val Asp 325 330 His Glu Ile Gly Met Val Ser Leu Val Arg Asn Leu Glu Glu Phe Phe 345 350 Ala Arg Glu Ser Cys Gly Trp Cys Thr Pro Cys Arg Asp Gly Leu Pro 360 365 Trp Ser Val Lys Ile Leu Arg Ala Ile Glu Arg Gly Glu Gly Gln Pro 375 380 Gly Asp Ile Glu Thr Leu Glu Gln Leu Cys Arg Phe Leu Gly Pro Gly 390 395 Lys Thr Phe Cys Ala His Ala Pro Gly Ala Val Glu Pro Leu Gln Ser 405 410 Ala Ile Lys Tyr Phe Arg Asp Glu Phe Glu Ala Gly Ile Lys Gln Pro 420 425 Phe Ser Asn Thr His Ser Ile Asn Gly Ile Gln Pro Asn Leu Leu Lys 435 Ala Arg Trp

<210> 9770

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<211> 920
<212> PRT
<213> Enterobacter cloacae
<400> 9770
Arg Ser Val Ser Ala Glu Pro Thr Gly Ser Met Leu Met Ala Thr Ile
His Val Asp Gly Lys Glu Tyr Glu Val Asn Gly Ala Asp Asn Leu Leu
Glu Ala Cys Leu Ser Leu Gly Leu Asp Ile Pro Tyr Phe Cys Trp His
Pro Ala Leu Gly Ser Val Gly Ala Cys Arg Gln Cys Ala Val Lys Gln
Tyr Gln Asn Ala Glu Asp Thr Arg Gly Arg Leu Val Met Ser Cys Met
Thr Pro Ala Ala Glu Gly Thr Phe Ile Ser Ile Asp Asp Glu Glu Ala
                                    90
Lys Gln Phe Arg Glu Ser Val Val Glu Trp Leu Met Thr Asn His Pro
            100
                                105
His Asp Cys Pro Val Cys Glu Glu Gly Gly Asn Cys His Leu Gln Asp
        115
                            120
Met Thr Val Met Thr Gly His Ser Phe Arg Arg Tyr Arg Phe Thr Lys
                        135
                                            140
Arg Thr His Arg Asn Gln Asp Leu Gly Pro Phe Ile Ser His Glu Met
                    150
Asn Arg Cys Ile Ala Cys Tyr Arg Cys Val Arg Tyr Tyr Lys Asp Tyr
                                    170
Ala Asp Gly Gln Asp Leu Gly Val Tyr Gly Ala His Asp Asn Val Tyr
                                185
Phe Gly Arg Pro Glu Asp Gly Thr Leu Glu Ser Glu Phe Ser Gly Asn
                            200
Leu Val Glu Ile Cys Pro Thr Gly Val Phe Thr Asp Lys Thr His Ser
                        215
Glu Arg Tyr Asn Arg Lys Trp Asp Met Gln Phe Ala Pro Ser Ile Cys
                    230
                                        235
Gln Gln Cys Ser Leu Gly Cys Asn Thr Ser Pro Gly Glu Arg Tyr Gly
                245
                                    250
Glu Leu Arg Arg Ile Glu Asn Arg Tyr Asn Gly Thr Val Asn His Tyr
                                265
Phe Leu Cys Asp Arg Gly Arg Phe Gly Tyr Gly Tyr Val Asn Leu Lys
                            280
Asp Arg Pro Arg Gln Pro Val Gln Arg Arg Gly Asp Asp Val Ile Thr
                        295
                                            300
Leu Asn Ala Glu Gln Ala Met Gln Gly Ala Ala Asp Ile Leu Arg Gln
                                        315
                    310
Ser Lys Lys Val Ile Gly Ile Gly Ser Pro Arg Ala Ser Ile Glu Ser
                                    330
                325
Asn Phe Ala Leu Arg Glu Leu Val Gly Ala Glu Asn Phe Tyr Thr Gly
                                345
                                                    350
Ile Ala Gln Gly Glu Gln Glu Arg Leu Gln Leu Val Leu Lys Val Leu
                            360
Arg Glu Gly Gly Val His Thr Pro Ala Leu Arg Glu Ile Glu Ser Tyr
                        375
                                            380
Asp Ala Val Leu Val Leu Gly Glu Asp Leu Thr Gln Thr Gly Ala Arg
                    390
                                        395
Ala Ala Leu Ala Val Arg Gln Ala Val Lys Gly Lys Ala Arg Glu Met
                                    410
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Ala Ala Ala Gln Lys Val Ala Asp Trp Gln Ile Ala Ala Ile Leu Asn

420 425 430 Ile Gly Gln Arg Ala Lys His Pro Leu Phe Val Thr Asn Val Asp Asn 440 445 Thr Arg Leu Asp Asp Ile Ala Ala Trp Thr Tyr Cys Ala Pro Val Glu 455 460 Asp Gln Ala Arg Leu Gly Phe Ala Ile Ala His Ala Leu Asp Asn Asn 470 475 Ser Pro Ala Val Glu Leu Asp Arg Asp Leu Gln Asn Lys Val Asp Val 490 Ile Val Gln Ala Leu Ala Gly Ala Lys Lys Pro Leu Ile Ile Ser Gly 505 Thr Asn Ala Gly Ser Ala Glu Ile Ile Gln Ala Ala Ala Asn Val Ala 520 525 Lys Ala Leu Lys Gly Arg Gly Ala Asp Val Gly Val Thr Met Ile Ala 535 Arg Ala Val Asn Ser Ile Gly Leu Gly Met Ile Gly Gly Ser Leu 550 555 Glu Asp Ala Leu Ser Glu Leu Glu Ser Gly Ala Ala Asp Ala Val Val 565 570 Val Leu Glu Asn Asp Leu His Arg His Ala Ser Ala Ala Arg Val Asp 580 585 590 Ala Ala Leu Ser Arg Ala Pro Leu Val Met Val Ile Asp His Gln Arg 600 605 Thr Ala Ile Met Asp Lys Ala His Leu Val Leu Ser Ala Ala Ser Phe 615 Ala Glu Ser Asp Gly Thr Val Ile Asn Asn Glu Gly Arg Ala Gln Arg 630 635 Phe Phe Gln Val Tyr Asp Pro Ala Tyr Tyr Asp Ser Asn Thr Val Met 645 650 Leu Glu Ser Trp Arg Trp Leu His Ser Leu His Ser Thr Val Gln Ser 660 665 Arg Glu Val Asp Trp Thr Gln Leu Asp His Val Ile Asp Ala Val Val 680 Glu Lys Leu Pro Gln Leu Ala Gly Ile Lys Asp Ala Ala Pro Asp Ala 695 Ser Phe Arg Ile Arg Gly Gln Lys Leu Ala Arg Glu Pro His Arg Tyr 710 715 Ser Gly Arg Thr Ala Met Arg Ala Asn Ile Ser Val His Glu Pro Arg 730 Gln Pro Gln Asp Lys Asp Thr Met Phe Ala Phe Ser Met Glu Gly Asn 745 Asn Gln Pro Ser Ala Pro Arg Ser Gln Ile Pro Phe Ala Trp Ala Pro 760 Gly Trp Asn Ser Pro Gln Ala Trp Asn Lys Phe Gln Ala Glu Val Gly 775 780 Gly His Leu Arg His Gly Asp Pro Gly Val Arg Leu Ile Glu Ala Ser 790 795 Glu Thr Gly Leu Asp Phe Phe Thr Thr Val Pro Ala Ser Phe Gln Ala 805 810 Gln Glu Gly His Trp Arg Ile Ala Pro Tyr Tyr His Leu Phe Gly Ser 820 825 Asp Glu Met Ser Gln Arg Ser Pro Val Phe Pro Gln Arg Met Pro Gln 835 840 845 Pro Tyr Ile Lys Leu Asn Pro Ala Asp Ala Ala Lys Leu Gly Val Asn 855 860 Ala Gly Ala Asn Ile Ala Phe Ser Tyr Asp Gly Gln Thr Ile Ser Leu 870 875 Pro Leu Ile Ile Ser Glu Arg Leu Ser Ala Gly Gln Val Gly Leu Pro 885 890 Met Gly Met Pro Gly Ile Ala Pro Val Leu Ala Gly Ala His Leu Asp 905

Asn Leu Gln Glu Ala Lys Ala

915 <210> 9771 <211> 617 <212> PRT <213> Enterobacter cloacae <400> 9771 Val Ala Trp Met Asn Met Leu Ala Leu Thr Ile Ile Phe Pro Leu Ile Gly Phe Val Leu Leu Ala Phe Ser Arg Gly Arg Trp Ser Glu Asn Leu 20 25 Ser Ala Thr Val Gly Ile Gly Ser Ile Gly Leu Ala Ala Leu Val Thr 40 Ala Tyr Ala Gly Ile Asp Phe Phe Asn Asn Gly Arg Gln Ala Tyr Ser 55 Val Pro Leu Trp Asn Trp Met Ser Val Gly Asn Phe Asn Ile Gly Phe 70 75 Asn Leu Val Leu Asp Gly Leu Ser Leu Thr Met Leu Ser Val Val Thr 90 85 Gly Val Gly Phe Leu Ile His Met Phe Ala Ser Trp Tyr Met Arg Gly 100 105 Glu Glu Gly Tyr Ser Arg Phe Phe Ala Tyr Thr Asn Leu Phe Ile Ala 115 120 Ser Met Val Val Leu Val Leu Ala Asp Asn Leu Leu Leu Met Tyr Leu 135 Gly Trp Glu Gly Val Gly Leu Cys Ser Tyr Leu Leu Ile Gly Phe Tyr 150 155 Tyr Thr Asp Pro Lys Asn Gly Ala Ala Ala Met Lys Ala Phe Val Val 165 170 Thr Arg Val Gly Asp Val Phe Leu Ala Phe Ala Leu Phe Ile Leu Tyr 180 185 Asn Glu Leu Gly Thr Leu Asn Phe Arg Glu Met Val Glu Leu Ala Pro 200 Ala His Phe Glu Ala Gly Asn Asn Met Leu Trp Trp Ala Thr Leu Met 215 220 Leu Leu Gly Gly Ala Val Gly Lys Ser Ala Gln Leu Pro Leu Gln Thr 230 235 Trp Leu Ala Asp Ala Met Ala Gly Pro Thr Pro Val Ser Ala Leu Ile 250 His Ala Ala Thr Met Val Thr Ala Gly Val Tyr Leu Ile Ala Arg Thr 265 His Gly Leu Phe Leu Met Thr Pro Glu Ile Leu His Leu Val Gly Ile 280 Val Gly Ala Val Thr Leu Val Leu Ala Gly Phe Ala Ala Leu Val Gln 295 300 Thr Asp Ile Lys Arg Val Leu Ala Tyr Ser Thr Met Ser Gln Ile Gly 310 315 Tyr Met Phe Leu Ala Leu Gly Val Gln Ala Trp Asp Ala Ala Ile Phe 325 330 His Leu Met Thr His Ala Phe Phe Lys Ala Leu Leu Phe Leu Ser Ser 345 Gly Ser Val Ile Leu Ala Cys His His Glu Gln Asn Ile Phe Lys Met 360 Gly Gly Leu Arg Lys Ser Ile Pro Leu Val Tyr Val Cys Phe Leu Val 375 380 Gly Gly Ala Ala Leu Ala Ala Leu Pro Leu Ile Thr Ala Gly Phe Phe 390 395 Ser Lys Asp Glu Ile Leu Ala Gly Ala Met Ala Asn Gly His Ile Asn

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Leu Met Val Ala Gly Leu Val Gly Ala Phe Met Thr Ser Leu Tyr Thr
            420
                                425
Phe Arg Met Ile Phe Ile Val Phe His Gly Lys Glu Gln Ile His Ala
                            440
                                                445
His Ala Gly Lys Gly Ile Thr His His Leu Pro Leu Ile Val Leu Leu
                        455
                                            460
Val Leu Ser Thr Phe Val Gly Ala Met Ile Val Pro Pro Leu Gln Gly
                    470
                                        475
Val Leu Pro Ala Thr Thr Glu Leu Glu His Gly Arg Val Leu Thr Leu
                485
                                    490
Glu Ile Thr Ser Gly Val Val Ala Ile Ala Gly Ile Leu Ile Ala Ala
                                505
Trp Leu Trp Leu Gly Lys Arg Thr Leu Val Thr Ala Val Ala Asn Ser
                            520
                                                525
Ala Pro Gly Arg Leu Leu Gly Thr Trp Trp Tyr Asn Ala Trp Gly Phe
                        535
                                            540
Asp Trp Leu Tyr Asp Met Ile Phe Val Lys Pro Phe Leu Gly Ile Ala
                    550
                                        555
Trp Leu Leu Lys Arg Asp Pro Leu Asn Ser Leu Met Asn Ile Pro Ala
                565
                                    570
Ile Leu Ser Arg Phe Ala Gly Lys Gly Leu Leu Phe Ser Glu Asn Gly
            580
                                585
                                                    590
Tyr Leu Arg Trp Tyr Val Ala Ser Met Ser Ile Gly Ala Val Val
        595
                            600
Leu Ala Leu Leu Met Val Leu Arg
   610
<210> 9772
<211> 512
<212> PRT
<213> Enterobacter cloacae
<400> 9772
Ile Ala Met Leu Leu Pro Trp Leu Ile Leu Ile Pro Phe Ile Gly Gly
                                    10
Phe Leu Cys Trp Gln Thr Glu Arg Phe Gly Val Lys Met Pro Arg Trp
            20
Ile Ala Leu Ile Thr Met Gly Leu Thr Leu Ala Leu Gly Leu Gln Leu
Trp Leu Gln Gly Gly Tyr Ser Leu Thr Gln Ser Ala Gly Leu Pro Gln
Trp Gln Ser Glu Phe Ile Leu Pro Trp Ile Pro Arg Phe Gly Ile Thr
                                        75
Ile His Leu Ala Ile Asp Gly Leu Ser Leu Leu Met Val Val Leu Thr
Gly Leu Leu Gly Val Leu Ala Val Leu Cys Ser Trp Arg Glu Ile Glu
                                105
            100
                                                    110
Lys Tyr Gln Gly Phe Phe His Leu Asn Leu Met Trp Ile Leu Gly Gly
                            120
                                                125
Val Ile Gly Val Phe Leu Ala Ile Asp Met Phe Leu Phe Phe Phe Phe
                        135
                                            140
Trp Glu Met Met Leu Val Pro Met Tyr Phe Leu Ile Ala Leu Trp Gly
                    150
                                        155
His Lys Ala Ser Asp Gly Lys Thr Arg Ile Thr Ala Ala Thr Lys Phe
                165
                                    170
Phe Ile Tyr Thr Gln Ala Ser Gly Leu Val Met Leu Ile Ala Ile Leu
           180
                               185
Ala Leu Val Phe Val His Tyr Asn Ala Thr Gly Val Trp Thr Phe Asn
                            200
                                                205
Tyr Glu Asp Leu Leu Lys Thr Pro Met Ser His Gly Val Glu Tyr Leu
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215

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Leu Met Leu Gly Phe Phe Ile Ala Phe Ala Val Lys Met Pro Val Val
                   230
                                       235
Pro Leu His Gly Trp Leu Pro Asp Ala His Ser Gln Ala Pro Thr Ala
               245
                                   250
Gly Ser Val Asp Leu Ala Gly Ile Leu Leu Lys Thr Ala Ala Tyr Gly
                               265
Leu Leu Arg Phe Ser Leu Pro Leu Phe Pro Asn Ala Ser Ala Glu Phe
                           280
Ala Pro Ile Ala Met Trp Leu Gly Val Ile Gly Ile Phe Tyr Gly Ala
                       295
Trp Met Ala Phe Thr Gln Tyr Asp Ile Lys Arg Leu Ile Ala Tyr Thr
                                        315
                    310
Ser Val Ser His Met Gly Phe Val Leu Ile Ala Ile Tyr Thr Gly Ser
                                    330
                325
Gln Leu Ala Tyr Gln Gly Ala Val Ile Gln Met Ile Ala His Gly Leu
                                345
           340
Ser Ala Ala Gly Leu Phe Ile Leu Cys Gly Gln Leu Tyr Glu Arg Leu
                            360
His Thr Arg Asp Met Arg Met Met Gly Gly Leu Trp Gly Lys Met Lys
                       375
                                            380
Trp Leu Pro Ala Leu Ser Met Phe Phe Ala Val Ala Thr Leu Gly Met
                    390
                                        395
Pro Gly Thr Gly Asn Phe Val Gly Glu Phe Met Ile Leu Phe Gly Ser
                                    410
Phe Asn Val Val Pro Thr Ile Thr Val Ile Ser Thr Phe Gly Leu Val
                                425
           420
Phe Ala Ser Val Tyr Ser Leu Ala Met Leu His Arg Ala Tyr Phe Gly
        435
                            440
Lys Ala Lys Ser Glu Ile Ala Ala Gln Glu Leu Pro Gly Met Ser Leu
                       455
Arg Glu Leu Phe Ile Ile Leu Leu Val Val Leu Leu Val Leu Leu
                                        475
                    470
Gly Phe Tyr Pro Gln Pro Ile Leu Asp Thr Ser His Ser Ala Met Gly
               485
                                    490
Asn Ile Gln Gln Trp Phe Val Asn Ser Ala Ser Thr Thr Arg Pro
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<210> 9773 <211> 488 <212> PRT

<213> Enterobacter cloacae

<400> 9773

Phe Ala Met Thr Ile Thr Pro Gln Gln Leu Ile Ala Leu Leu Pro Leu 10 Leu Ile Val Gly Leu Thr Val Val Val Val Met Leu Ser Ile Ala Trp 25 Arg Arg Asn His Phe Leu Asn Ala Thr Leu Ser Val Leu Gly Leu Asn 40 Ala Ala Leu Val Ser Leu Trp Phe Val Gly Gln Ala Gly Ala Met Asp 55 Val Thr Pro Leu Met Arg Val Asp Gly Tyr Ala Met Leu Tyr Thr Gly 75 Leu Val Leu Leu Ala Ser Leu Ala Thr Cys Thr Phe Ala Tyr Pro Trp 90 Leu Glu Gly Tyr Asn Asp Asn Lys Glu Glu Phe Tyr Leu Leu Val Leu 105 Ile Ala Ala Leu Gly Gly Ile Leu Leu Ala Asn Ala Asn His Met Ala 120 Ala Leu Phe Leu Gly Ile Glu Leu Ile Ser Leu Pro Leu Phe Gly Leu

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Ile Gly Tyr Ala Phe Arg Gln Lys Arg Ser Leu Glu Ala Ala Ile Lys
                   150
                                       155
Tyr Thr Ile Leu Ser Ala Ala Ala Ser Ser Phe Leu Leu Phe Gly Ile
                                    170
                165
Ala Leu Leu Tyr Ala Gln Thr Gly Asn Leu Ser Phe Leu Ala Ile Gly
            180
                                185
Lys Ser Leu Gly Asp Gly Met Met His Glu Pro Leu Leu Ala Gly
                            200
Leu Gly Met Met Ile Val Gly Leu Gly Phe Lys Leu Ser Leu Val Pro
                        215
                                            220
Phe His Leu Trp Thr Pro Asp Val Tyr Gln Gly Ala Pro Ala Pro Val
                    230
                                        235
Ser Thr Phe Leu Ala Thr Ala Ser Lys Ile Ala Ile Phe Gly Val Val
                245
                                    250
Met Arg Leu Phe Leu Tyr Ala Pro Val Gly Asp Ser Glu Ala Val Arg
                                265
Val Val Leu Gly Ile Ile Ala Phe Val Ser Ile Ile Phe Gly Asn Leu
        275
                            280
Met Ala Leu Ser Gln Thr Asn Ile Lys Arg Leu Leu Gly Tyr Ser Ser
                        295
                                            300
Ile Ser His Leu Gly Tyr Leu Leu Val Ala Leu Ile Ala Leu Gln Ser
                    310
                                        315
Gly Glu Met Ser Met Glu Thr Val Gly Val Tyr Leu Ala Gly Tyr Leu
                                    330
                325
                                                         335
Phe Ser Ser Leu Gly Ala Phe Gly Val Val Ser Leu Met Ser Ser Pro
            340
                                345
                                                    350
Tyr Arg Gly Pro Asp Ala Asp Ser Leu Phe Ser Tyr Arg Gly Leu Phe
        355
                            360
                                                365
Trp His Arg Pro Ile Leu Ser Ala Val Met Thr Val Met Met Leu Ser
                        375
                                            380
Leu Ala Gly Ile Pro Met Thr Leu Gly Phe Ile Gly Lys Phe Tyr Val
                    390
                                        395
Leu Ala Val Gly Val Gln Ala Gly Leu Trp Trp Leu Thr Ala Gly Val
                405
                                    410
                                                        415
Val Ile Gly Ser Ala Ile Gly Leu Tyr Tyr Tyr Leu Arg Val Ala Val
            420
                                425
                                                    430
Ser Leu Tyr Leu Ser Ala Pro Gln Gln Leu Asn Arg Asp Ala Pro Ser
                            440
        435
Asn Trp Gln Tyr Ser Ala Gly Gly Ile Val Val Leu Ile Ser Ala Leu
                        455
Leu Val Leu Ile Phe Gly Ile Tyr Pro Gln Pro Leu Ile Asp Ile Val
                    470
Gln Arg Ala Met Pro Leu Met
                485
```

<210> 9774 <211> 113

<212> PRT

<213> Enterobacter cloacae

### <400> 9774

Leu Pro Asp Trp Cys Thr Asn Met Glu Lys Asn Met Ser Phe Gln Ser 10 Trp Asp Thr Arg Val Asp Asp Asp Leu Thr Leu Leu Ser Glu Thr Leu 25 Glu Glu Val Leu Arg Ser Ser Gly Asp Pro Ala Asp Gln Lys Tyr Ile 40 Glu Leu Lys Ala Arg Ala Glu Gln Ala Leu His Asp Val Lys Asn Arg 55 60 Val Ser Asn Ala Ser Asp Asn Tyr Tyr Tyr Arg Ala Lys Gln Ala Val 70

Tyr Arg Ala Asp Asp Tyr Val His Glu Lys Pro Trp Gln Gly Ile Gly 85 90 95

Val Gly Ala Ala Val Gly Leu Val Leu Gly Leu Leu Ala Arg Arg 100 105 110

<210> 9775 <211> 589 <212> PRT <213> Enterobacter cloacae <400> 9775 Gly Ile Asn Thr Asp Ser Cys Asn Pro Asp Ser Tyr Gln Asn Ser Asp 10 Phe Phe Tyr Tyr Leu Tyr Cys Val Ala Phe Leu Ile Leu Asp Asn Leu 20 Met Ser Val Ser Ser Phe Asn Arg Arg Trp Ala Ala Val Ile Leu Glu 40 Ala Leu Thr Arg His Gly Val Arg His Val Cys Ile Ala Pro Gly Ser 55 Arg Ser Thr Pro Leu Thr Leu Ala Ala Ala Glu Asn Arg Ala Phe Ile His His Thr His Phe Asp Glu Arg Gly Leu Gly His Leu Ala Leu Gly 90 Leu Ala Lys Val Ser Lys Ala Pro Val Ala Val Ile Val Thr Ser Gly 105 Thr Ala Val Ala Asn Leu Tyr Pro Ala Leu Ile Glu Ala Gly Leu Thr 120 Gly Glu Lys Leu Ile Leu Leu Thr Ala Asp Arg Pro Pro Glu Leu Ile 135 Asp Cys Gly Ala Asn Gln Ala Ile Arg Gln Pro Gly Ile Phe Ala Ser 150 155 His Pro Ser Gln Thr Val Ser Leu Pro Arg Pro Thr Gln Asp Ile Pro 165 170 Ala Ser Trp Leu Val Ser Thr Leu Asp His Ala Met Asn Ala Leu Arg 180 185 Ser Gly Gly Leu His Ile Asn Cys Pro Phe Ala Glu Pro Leu Tyr Gly ,200 195 Glu Met Asn Asp Thr Gly Leu Val Trp Gln Gln Gln Leu Gly Asp Trp 215 220 Trp Glu Ser Glu Lys Pro Trp Leu Arg Glu Gln Thr His Leu Glu Ser 230 235 Ala Lys Gln Arg Asp Trp Phe Phe Trp Arg Gln Lys Arg Gly Val Val 245 250 Ile Ala Gly Arg Met Ser Ala Ala Glu Gly Lys Leu Ala Ala Glu Trp 260 265 Ala Gln Thr Leu Gly Trp Pro Leu Ile Gly Asp Val Leu Ser Gln Thr 280 285 Gly Gln Pro Leu Pro Cys Ala Asp Leu Trp Leu Gly Asn Ala Lys Ala 295 300 Val Thr Glu Leu Ala Gln Ala Gln Ile Val Val Gln Leu Gly Ser Ser 310 315 Leu Thr Gly Lys Arg Leu Leu Gln Trp Gln Ala Thr Cys Thr Pro Glu 330 Glu Tyr Trp Leu Val Asp Pro Leu Glu Gly Arg Leu Asp Pro Ala His 345 His Arg Gly Arg Arg Leu Val Ser Asp Ile Asn Ser Trp Leu Glu Leu 360 His Pro Ala Glu Lys Arg Lys Pro Trp Ala Val Glu Ile Pro Ala Leu

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Ser Arg Gln Ala Trp Glu Leu Thr Lys Ala Gln Cys Glu Ala Phe Ser
                    390
                                        395
Glu Ala Gly Leu Ala His Arg Ile Arg Lys Tyr Leu Pro Glu Gln Gly
                405
                                    410
Gln Leu Phe Val Gly Asn Ser Leu Val Val Arg Leu Ile Asp Ala Phe
                                425
Ser Gln Leu Pro Ala Gly Tyr Pro Val Tyr Ser Asn Arg Gly Ala Ser
                            440
Gly Ile Asp Gly Leu Ile Ser Thr Ala Ala Gly Val Gln Arg Ala Ser
                        455
                                             460
Ala Lys Ser Thr Leu Ala Ile Val Gly Asp Leu Ser Ala Leu Tyr Asp
                                         475
                    470
Leu Asn Ala Leu Ala Leu Leu Arg Gln Ala Ser Ala Pro Phe Val Leu
                485
                                    490
Ile Ile Val Asn Asn Gly Gly Gln Ile Phe Ser Leu Leu Pro Thr
            500
                                505
Pro Gln Ser Glu Arg Glu Arg Phe Tyr Leu Met Pro Gln Asn Val Gln
                            520
                                                 525
Phe Glu His Ala Ala Ala Met Phe Ser Leu Lys Tyr His Arg Pro Glu
                        535
                                             540
Asn Trp Asp Ala Leu Glu Thr Ala Leu Asn Thr Ala Trp Arg Gln Pro
                    550
                                        555
Gly Ala Thr Leu Ile Glu Leu Val Val Asn Asp Ala Asp Gly Ala Gln
                565
                                    570
Lys Leu Gln His Leu Leu Ala Gln Val Ser His Leu
            580
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<210> 9776

<211> 356

<212> PRT

<213> Enterobacter cloacae

<400> 9776

Arg His His Ala Val Leu Tyr Asp Arg Gly Ser Gly Arg Ala Gln 10 Arg Val Gln Arg Lys Thr Pro Ala Arg Leu Gln Gln Ile Gln Thr Glu 25 Pro Val Met Arg Arg Val Gln Val Tyr Arg Trp Gln Ile Pro Met Asp Ala Gly Val Val Leu Arg Glu Arg Arg Leu Lys Thr Arg Asp Gly Phe 55 Phe Val His Leu Arg Glu Gly Glu Arg Glu Gly Trp Gly Glu Ile Ala 70 75 Pro Leu Pro Gly Phe Ser Leu Glu Thr Leu Asp Glu Ala Gln Ala Ala 85 90 Leu Met Ala Trp Thr His Ala Trp Arg Glu Gly Glu Asp Pro Ala Leu 100 105 Pro Asp Val Pro Ser Val Ala Phe Gly Ile Ser Cys Ala Leu Ala Glu 120 125 Leu Asp Gly Ser Leu Pro Glu Ala Ala Asn Tyr Arg Ala Ala Pro Leu 135 140 Cys Thr Gly Asp Pro Asp Glu Leu Phe Ala Leu Leu Ser Ala Met Pro 150 155 Gly Glu Lys Val Ala Lys Ile Lys Val Gly Leu Tyr Glu Ala Val Arg 170 Asp Gly Met Val Val Asn Leu Leu Glu Ala Ile Pro Asp Leu His 185 Leu Arg Leu Asp Ala Asn Arg Ala Trp Thr Pro Leu Arg Ala Gln Gln 200 Phe Ala Lys Tyr Val Asn Pro Ala Tyr Arg Ser Arg Ile Ala Phe Leu

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Glu Glu Pro Cys Lys Thr Arg Asp Asp Ser Arg Ala Phe Ala Arg Glu
                   230
                                       235
Thr Gly Ile Ala Ile Ala Trp Asp Glu Ser Leu Arg Glu Ala Asp Phe
                245
                                    250
Ala Phe Ala Ala Glu Pro Gly Val Arg Ala Val Val Ile Lys Pro Thr
                                265
Leu Thr Gly Ser Leu Asp Lys Val Arg Glu Gln Val Ala Ala Ala His
        275
                            280
Ala Ala Gly Leu Thr Ala Val Ile Ser Ser Ser Ile Glu Ser Ser Leu
                        295
                                            300
Gly Leu Thr Gln Leu Ala Arg Ile Ala Ala Trp Leu Thr Pro Asp Thr
                    310
                                        315
Val Pro Gly Leu Asp Thr Leu Asn Leu Met Gln Ala Gln Leu Ile Arg
                                    330
                325
Gln Trp Pro Gly Ser Thr Leu Pro Cys Leu Asp Val Gly Ala Leu Glu
            340
                                345
Pro Leu Arg
       355
<210> 9777
<211> 374
<212> PRT
<213> Enterobacter cloacae
<400> 9777
Pro Ala Ala Ala Cys Gly Ser Pro Pro Ser Gly Gly Trp Ala Thr Cys
                                    10
Trp Ser Ala Ala Met Lys Trp Val Lys Pro Gln Ser Leu Tyr Leu Gln
                                25
Leu Leu Phe Leu Gly Leu Pro Leu Leu Leu Trp Gly Leu Ser
Ala Phe Asn Ser Tyr Val Ser Ala Leu Gln Ala Ala Thr Gln Ala Tyr
Asp Arg Thr Leu Leu Ser Ser Ala Arg Thr Val Ser Glu Arg Leu Val
Val His Asn Gly Lys Leu Gln Val Asn Val Pro Trp Val Val Leu Asp
               85
Ser Phe Glu Leu Asn Met Asn Asp Arg Leu Tyr Tyr Lys Val Val Asp
            100
                                105
                                                    110
Pro Asp Gly Arg Thr Ile Ser Gly Tyr Asp Asp Leu Pro Asn Met Pro
       115
                            120
                                                125
Pro Ser Thr Ser Arg Thr Ser His Tyr Pro Ala Leu Ala Trp Phe Tyr
                        135
                                            140
His Thr Glu Tyr Arg Gly Gln Ala Ile Arg Val Ala Lys Leu Gln
                   150
                                        155
Pro Val Asn Glu Asp Ser Val Phe Gly Met Ala Glu Ile Tyr Val Ala
               165
                                    170
Glu Thr Leu Gln Ser Arg Arg Tyr Leu Ala Thr Gln Leu Leu Phe Ser
                                185
            180
Ser Leu Val Ser Gln Gly Leu Leu Val Leu Thr Leu Val Leu Thr
                            200
                                                205
Ala Trp Leu Leu Arg Arg Val Leu Arg Pro Met Arg Gln Leu Ser Ser
                        215
                                            220
Leu Met Val Arg Arg Glu Pro Gly Leu Leu Ala Pro Leu Pro Glu Leu
                   230
                                        235
Leu Pro Trp Ser Glu Thr Arg Leu Leu Ile Val Ala Phe Asn Arg Tyr
                                    250
Ile Asp Arg Leu Arg Gly Val Leu Ser Arg Gln Ala Arg Phe Asn Ala
                               265
Asp Ala Ser His Gln Leu Lys Thr Pro Leu Ala Val Leu Lys Thr Gln
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5329 Val Ser Val Ala Leu Thr Arg Asn Asp Pro Ala Leu Trp Gln Glu Ser 295 300 Leu Arg Ala Met Asn Val Thr Leu Asp Asn Thr Ile Val Leu Thr Glu 310 315 Arg Leu Leu Gln Leu Ser Ala Val Lys Arg Lys Glu Gln Gly Glu Arg 330 325 Gln Phe Ala Pro Val Asp Leu Val Gln Val Gln Asn Cys Cys Phe 345 Ser Arg Leu Ala Gln Ala Arg Ser Lys Gly Ile Asp Leu Gly Tyr Asp 355 360 Gly Val Ser Ser Arg 370 <210> 9778 <211> 407 <212> PRT <213> Enterobacter cloacae <400> 9778 Pro Leu Lys Trp Glu Asn Thr Met Ile Asn Val Glu Met Leu Ser Thr 10 Gly Asp Glu Val Leu His Gly Gln Ile Ile Asp Thr Asn Ala Ala Trp 20 25 Leu Ala Asp Leu Phe Phe Glu Gln Gly Leu Pro Leu Thr Arg Arg Asn 40 Thr Val Gly Asp Asn Leu Glu Ser Leu Val Asn Val Leu Arg Glu Arg 55 Ser Glu Arg Cys Asp Val Leu Ile Val Asn Gly Gly Leu Gly Pro Thr 70 75 Ser Asp Asp Leu Ser Ala Leu Ala Ala Ala Thr Ala Lys Gly Glu Gly 85 -90 Leu Val Leu His Glu Ala Trp Leu Ala Gln Met Glu Arg Phe Phe Ser 105 Glu Arg Gly Arg Val Met Ala Pro Ser Asn Arg Lys Gln Ala Glu Ile 115 120 Pro Ala Ser Ala Glu Leu Ile Asp Asn Pro Val Gly Thr Ala Cys Gly 135 140 Phe Ala Val Gln Leu Asn Arg Cys Leu Met Phe Phe Thr Pro Gly Val 150 Pro Ser Glu Phe Lys Val Met Val Glu Gln Gln Ile Leu Pro Arg Leu 170 165 Arg Ala Arg Phe Thr Leu Pro Glu Pro Pro Leu Cys Leu Arg Leu Thr 180 185 190 . Thr Phe Gly Arg Ser Glu Ser Asp Leu Ala Gln Ser Leu Asp His Leu 195 200 Gln Leu Pro Pro Gly Val Ser Met Gly Tyr Arg Ser Ser Met Pro Ile

215 220 Ile Glu Leu Lys Leu Thr Gly Pro Ala Ser Glu Lys Ala Ala Met Leu 235 230 Ala Leu Trp Pro Glu Val Arg Arg Val Ala Gly Glu Ser Leu Ile Phe 250 245 Glu Gly Thr Lys Gly Leu Pro Ala Gln Ile Ala Ala His Leu Gln Ser 265 260 Arg Gln Leu Ser Val Thr Leu Ser Glu Gln Phe Thr Gly Gly Leu Leu 275 280 285 Ala Leu Gln Leu Thr Arg Ala Gly Ala Pro Leu Leu Ala Ser Glu Val 295 300 Val Pro Phe Gln Gln Glu Thr Leu Ala Gln Thr Ala Arg Trp Ala Ser 310 315 Glu Arg Arg Val Lys His Phe Ala Gly Leu Ala Leu Phe Val Gly Gly

325

330

<210> 9779

<211> 879 <212> PRT

<213> Enterobacter cloacae

<400> 9779

Met Ser Asp Leu Ala Arg Glu Ile Thr Pro Val Asn Ile Glu Glu Glu 10 Leu Lys Ser Ser Tyr Leu Asp Tyr Ala Met Ser Val Ile Val Gly Arg 20 Ala Leu Pro Asp Val Arg Asp Gly Leu Lys Pro Val His Arg Arg Val 40 Leu Tyr Ala Met Asn Val Leu Gly Asn Asp Trp Asn Lys Ala Tyr Lys Lys Ser Ala Arg Val Val Gly Asp Val Ile Gly Lys Tyr His Pro His 70 Gly Asp Ile Ala Val Tyr Gly Thr Ile Val Arg Met Ala Gln Pro Phe 90 Ser Leu Arg Tyr Met Leu Val Asp Gly Gln Gly Asn Phe Gly Ser Ile 100 105 110 Asp Gly Asp Ser Ala Ala Ala Met Arg Tyr Thr Glu Ile Arg Leu Ala 120 Lys Ile Ala His Glu Leu Met Ala Asp Leu Glu Lys Glu Thr Val Asp 135 140 Phe Val Asp Asn Tyr Asp Gly Thr Glu Lys Ile Pro Asp Val Met Pro 150 Thr Lys Ile Pro Asn Leu Leu Val Asn Gly Ser Ser Gly Ile Ala Val 170 Gly Met Ala Thr Asn Ile Pro Pro His Asn Ile Thr Glu Val Ile Asn 185 Gly Cys Leu Ala Tyr Ile Asp Asp Glu Asp Ile Ser Ile Glu Gly Leu 200 Met Glu His Ile Pro Gly Pro Asp Phe Pro Thr Ala Ala Ile Ile Asn 215 Gly Arg Arg Gly Ile Glu Glu Ala Tyr Arg Thr Gly Arg Gly Lys Ile 230 235 Tyr Ile Arg Ala Arg Ala Glu Val Glu Ala Asp Ala Lys Thr Gly Arg 245 250 Glu Thr Ile Ile Val His Glu Ile Pro Tyr Gln Val Asn Lys Ala Arg 265 260 Leu Ile Glu Lys Ile Ala Glu Leu Val Lys Glu Lys Arg Val Glu Gly 275 280 285 Ile Ser Ala Leu Arg Asp Glu Ser Asp Lys Asp Gly Met Arg Ile Val 295 300 Ile Glu Ile Lys Arg Asp Ala Val Gly Glu Val Val Leu Asn Asn Leu 310 315 Tyr Ser Gln Thr Gln Leu Gln Val Ser Phe Gly Ile Asn Met Val Ala 325 330 Leu His His Gly Gln Pro Lys Ile Met Asn Leu Lys Glu Ile Leu Ser 345

Ala Phe Val Arg His Arg Arg Glu Val Val Thr Arg Arg Thr Ile Phe 360 Glu Leu Arg Lys Ala Arg Asp Arg Ala His Ile Leu Glu Ala Leu Ala 375 380 Val Ala Leu Ala Asn Ile Asp Pro Ile Ile Glu Leu Ile Arg Arg Ala 390 395 Pro Thr Pro Ala Glu Ala Lys Ala Ser Leu Val Ala Arg Ser Trp Asp 405 410 Leu Gly Asn Val Ala Ala Met Leu Glu Arg Ala Gly Asp Asp Ala Ala 425 Arg Pro Glu Trp Leu Glu Pro Glu Phe Gly Val Arg Asp Gly Gln Tyr 440 Tyr Leu Thr Glu Gln Gln Ala Gln Ala Ile Leu Asp Leu Arg Leu Gln 455 460 Lys Leu Thr Gly Leu Glu His Glu Lys Leu Leu Asp Glu Tyr Lys Glu 470 475 Leu Leu Glu Gln Ile Ala Glu Leu Leu His Ile Leu Gly Ser Ala Glu 485 490 Arg Leu Met Glu Val Ile Arg Glu Glu Leu Glu Leu Val Arg Asp Gln 500 505 Phe Gly Asp Glu Arg Arg Thr Glu Ile Thr Ala Asn Ser Ser Asp Ile 515 520 525 Asn Ile Glu Asp Leu Ile Asn Arg Glu Asp Val Val Thr Leu Ser 535 540 His Gln Gly Tyr Val Lys Tyr Gln Pro Leu Thr Asp Tyr Glu Ala Gln 555 550 Arg Arg Gly Gly Lys Gly Lys Ser Ala Ala Arg Ile Lys Glu Glu Asp 565 570 Phe Ile Asp Arg Leu Leu Val Ala Asn Thr His Asp Thr Ile Leu Cys -580 585 Phe Ser Ser Arg Gly Arg Leu Tyr Trp Met Lys Val Tyr Gln Leu Pro 600 605 Glu Ala Ser Arg Gly Ala Arg Gly Arg Pro Ile Val Asn Leu Leu Pro 615 620 Leu Glu Ala Asn Glu Arg Ile Thr Ala Ile Leu Pro Val Arg Glu Tyr 630 635 Glu Glu Gly Val Asn Val Phe Met Ala Thr Ala Ser Gly Thr Val Lys 650 Lys Thr Ala Leu Thr Glu Phe Ser Arg Pro Arg Ser Ala Gly Ile Ile 665 Ala Val Asn Leu Asn Glu Gly Asp Glu Leu Ile Gly Val Asp Leu Thr 680 Ser Gly Ser Asp Glu Val Met Leu Phe Ser Ala Ala Gly Lys Val Val 695 Arg Phe Lys Glu Asn Ala Val Arg Ala Met Gly Arg Thr Ala Thr Gly 710 715 Val Arg Gly Ile Lys Leu Ala Gly Glu Asp Ser Val Val Ser Leu Ile 725 730 Val Pro Arg Gly Glu Gly Ala Ile Leu Thr Val Thr Gln Asn Gly Tyr 740 745 750 Gly Lys Arg Thr Ala Glu Ser Glu Tyr Pro Thr Lys Ser Arg Gly Thr 760 765 Gln Gly Val Ile Ser Ile Lys Val Thr Glu Arg Asn Gly Ser Val Val 775 780 Gly Ala Val Gln Val Asp Asp Ala Asp Gln Ile Met Met Ile Thr Asp 790 795 Ala Gly Thr Leu Val Arg Thr Arg Val Ser Glu Ile Ser Val Val Gly 805 810 Arg Asn Thr Gln Gly Val Ile Leu Ile Arg Thr Ala Glu Asp Glu Asn 825 830 Val Val Gly Leu Gln Arg Val Ala Glu Pro Val Asp Asp Glu Glu Leu

840 835 845 Asp Ser Ile Asp Gly Ser Val Ala Glu Gly Asp Asp Glu Ile Ala Pro 855 860 Glu Ala Asp Ile Asp Asp Glu Ala Ala Asp Asp Ala Asp Glu 870 <210> 9780 <211> 957 <212> PRT <213> Enterobacter cloacae <400> 9780 Pro Arg Arg Arg Ser Leu Ala Pro Leu Lys Tyr Leu Val Ser Phe Arg 10 Thr Thr Leu Lys Val Ser Arg Tyr Leu Phe Arg Ala Leu Ala Leu Leu 20 25 Leu Trp Leu Leu Val Ala Leu Leu Ser Val Phe Tyr Ile Val Asn Ala Leu His Gln Lys Glu Ala Glu Ile Arg Gln Glu Phe Asn Leu Ser Ser 55 Asp Gln Ála Gln Arg Tyr Ile Gln Arg Thr Ser Asp Val Met Lys Glu 70 75 Leu Lys Tyr Ile Ala Glu Asn Arg Leu Thr Ala Glu Asn Gly Ile Leu 85 90 Ala Ile Arg Gly Arg Asp Glu Lys Thr Glu Val Pro Asp Phe Glu Pro 100 105 Leu Phe Pro Asp Ser Asp Cys Ser Ala Met Gly Lys Ala Trp Arg Gly 120 Ser Leu Glu Ser Leu Ser Trp Phe Met Arg Tyr Trp Arg Asp Asn Phe 135 140 Ser Ala Ala Tyr Asp Leu Asn Arg Val Tyr Leu Ile Ser Asn Glu Asn 150 155 Leu Cys Met Ala Asp Phe Gly Leu Arg Asp Met Pro Val Glu Arg Glu 170 Asp Ala Leu Lys Ser Leu His Glu Arg Ile Val Lys Tyr Arg Asn Ala 185 Pro Gln Glu Glu Arg Gly Asn Asn Ile Phe Trp Ile Ser Gln Gly Pro 200 Arg Met Gly Val Gly Tyr Phe Tyr Ala Leu Thr Pro Val Tyr Leu Gly 215 220 Asn Arg Leu Gln Ala Leu Leu Gly Ile Glu Gln Thr Ile Arg Met Glu 230 235 Asn Phe Phe Thr Pro Gly Ser Leu Pro Met Gly Val Thr Ile Leu Asp 245 250 Glu Asn Gly His Pro Leu Ile Ser Leu Thr Gly Pro Glu Asn Arg Leu 260 265 Lys Val Glu Pro Ser Trp Met Gln Glu Arg Ser Trp Phe Gly Tyr Thr 280 285 Ser Gly Phe Arg Glu Leu Val Leu Lys Lys Ser Leu Pro Pro Ser Ser 300 295 Leu Ser Ile Val Tyr Ser Leu Pro Val Asp Lys Val Leu Glu Arg Ile 310. 315 Arg Ile Leu Ile Leu Asn Ala Ile Leu Leu Asn Ile Ala Val Gly Val 325 330 Ala Leu Phe Met Leu Ala Arg Met Tyr Glu Arg Arg Ile Phe Ile Pro 345 Ala Glu Ala Asp Ala Gln Arg Leu Glu Glu His Glu Gln Phe Asn Arg 360 Lys Ile Val Ala Ser Ala Pro Val Gly Ile Cys Ile Leu Arg Thr Gln 375

Asp Gly Thr Asn Ile Leu Ser Asn Glu Leu Ala His Asn Tyr Leu Asn

385 Met	Leu	Thr	His	Glu	390 Asp	Arg	Gln	Arg	Leu	395 Thr	Gln	Ile	Ile	Cys	400 Gly
Gln	Gln	Val	Asn	405 Phe	Val	Asp	Val	Leu	410 Thr	Ser	Thr	His	Thr	415 Asn	Leu
Gln	Ile		420 Phe	Val	His	Ser		425 Tyr	Arg	Asn	Glu		430 Val	Ala	Ile
Суз		435 Leu	Val	Asp	Val		440 Ala	Arg	Val	Lys		445 Glu	Glu	Ser	Leu
	450 Asp	Met	Ala	Gln	Ala	455 Ala	Glu	Gln	Ala		460 Gln	Ser	Lys	Ser	
465 Phe	Leu	Ala	Thr		470 Ser	His	Glu	Leu	_	475 Thr	Pro	Leu	Tyr		480 Ile
Ile	Gly	Asn	Leu 500	485 Asp	Leu	Leu	Gln	Thr 505	490 Lys	Glu	Leu	Pro	Lys 510	495 Gly	Val
Asp	Arg	Leu 515		Thr	Ala	Met	Asn 520		Ser	Ser	Ser	Leu 525		Leu	Lys
Ile	Ile 530		Asp	Ile	Leu	Asp 535		Ser	Lys	Ile	Glu 540		Glu	Gln	Leu
Lys 545		Glu	Pro	Arg	Glu 550		Ser	Pro	Arg	Glu 555	Val	Met	Asn	His	Ile 560
Cys	Ala	Asn	Tyr	Leu 565	Pro	Leu	Val	Val	Arg 570	Lys	Gln	Leu	Gly	Leu 575	Tyr
Суѕ	Phe	Ile	Glu 580	Pro	Asp	Val	Pro	Leu 585	Thr	Leu	His	Gly	Asp 590	Pro	Met
_		595			Ile		600					605		_	
	610		_		Ile	615					620				
625			_		Arg 630			-		635					640
				645	Asp				650					655	
			660		Thr			665					670		
		675			Gly		680					685			
_	690				Ile	695					700				
705					710					715					720
				725	Leu		_		730					735	
	_		740		Ser	_	_	745	_				750		_
_		755			Asp		760					765		_	_
_	770				Cys	775					780				
785		_		_	Val 790					795					800
				805	Ile				810					815	
			820		Ser		_	825					830	_	_
		835			Val	_	840					845	_		
	850			_	Ser	855				_	860				
865	val	Asp	нта	ьeu	Asn 870	vaı	Leu	ser	ьys	875	п1S	тте	нѕр	тте	880

 Leu
 Ser
 Asp
 Val
 Asp
 Met
 Pro
 Asp
 Met
 Asp
 Gly
 Tyr
 Arg
 Leu
 Thr
 Gln
 890
 890
 Reg
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 Ser
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 Cln
 Leu
 Gly
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<210> 9781 <211> 179

<212> PRT

<213> Enterobacter cloacae

<400> 9781

Tyr Arg Phe Cys Tyr Val Arg Cys Gly Pro Leu Ile Met His Glu Asn 10 Gln Gln Pro Gln Thr Glu Ala Phe Glu Leu Ser Glu Ala Glu Arg Ala 20 Ala Ile Glu His Glu Met His His Tyr Glu Asp Pro Arg Ala Ala Ser 40 Ile Glu Ala Leu Lys Ile Val Gln Lys Gln Arg Gly Trp Val Pro Asp Gly Ala Ile Tyr Ala Ile Ala Glu Val Leu Gly Ile Pro Ala Ser Asp 70 75 Val Glu Gly Val Ala Thr Phe Tyr Ser Gln Ile Phe Arg Gln Pro Val 90 Gly Arg His Val Ile Arg Tyr Cys Asp Ser Val Val Cys His Ile Thr 105 Gly Tyr Gln Gly Ile Gln Ala Ala Ile Glu Lys Lys Leu Asn Ile Lys 120 Pro Gly Gln Thr Thr Phe Asp Gly Arg Phe Thr Leu Leu Pro Thr Cys 135 Cys Leu Gly Asn Cys Asp Lys Gly Pro Thr Met Met Ile Asp Glu Asp 150 Thr His Ser His Leu Thr Pro Glu Ala Ile Pro Asp Leu Leu Glu Gln

170

<210> 9782 <211> 141 <212> PRT

Tyr Lys

<213> Enterobacter cloacae

<400> 9782

Cys Trp Lys Ala Gly Ala Gly Cys Thr Leu Cys Thr Ala Pro Cys Arg 10 Ala Val Lys Trp Thr Gly Arg Ser Ser Thr Thr Leu Ser Thr Arg Leu 20 25 Leu Arg Asn Cys Leu Ser Trp Arg Val Leu Lys Met Pro Arg Arg Thr 40 Gln Ala Ser Ala Phe Ala Ala Arg Asn Trp Arg Val Ser Arg Thr Ala 55 60 Thr Ala Val Val Pro Arg Cys Ala Pro Thr Ser Ala Cys Thr Asn Arg 70 75 Val Ser Arg Arg Ile Lys Thr Pro Cys Ser Pro Ser Arg Trp Lys Gly 85 90 Thr Thr Ser Arg Leu Arg Arg Val Arg Lys Ser Arg Leu His Gly His

100 105 Arg Ala Gly Thr Pro Arg Arg His Gly Thr Asn Ser Arg Leu Lys Trp 120 Ala Val Thr Cys Ala Thr Ala Ile Gln Ala Cys Val <210> 9783 <211> 217 <212> PRT <213> Enterobacter cloacae <400> 9783 Pro Gly Asn Val Leu Arg Leu Glu Ser Val Pro Ala Ala Asp Ala Arg 10 Gln Leu Val Gly Asn Gly Gly Cys His Ser Leu Ala Ala Ala Ile Arg 20 Gly Phe Glu Ile Met Thr Leu Lys Glu Leu Leu Val Gly Phe Gly Thr 40 Gln Val Arg Ser Ile Trp Met Ile Gly Leu His Ala Phe Ala Lys Arg Glu Thr Arg Met Tyr Pro Glu Glu Pro Val Tyr Leu Pro Pro Arg Tyr 75 Arg Gly Arg Ile Val Leu Thr Arg Asp Pro Asp Gly Ser Glu Arg Cys Val Ala Cys Asn Leu Cys Ala Val Ala Cys Pro Val Gly Cys Ile Ser 105 110 Leu Gln Lys Ala Glu Thr Val Asp Gly Arg Trp Tyr Pro Glu Phe Phe 115 120 125 Arg Ile Asn Phe Ser Arg Cys Ile Phe Cys Gly Leu Cys Glu Glu Ala 135 140 Cys Pro Thr Thr Ala Ile Gln Leu Thr Pro Asp Phe Glu Leu Gly Glu 150 155 Tyr Lys Arg Gln Asp Leu Val Tyr Glu Lys Glu Asp Leu Leu Ile Ser 170 165 Gly Pro Gly Lys Tyr Pro Glu Tyr Asn Phe Tyr Arg Met Ala Gly Met 180 185 Ala Ile Asp Gly Lys Asp Lys Gly Glu Ala Glu Asn Glu Ala Lys Pro 195 200 Ile Asp Val Lys Ser Leu Leu Pro 210 <210> 9784 <211> 112 <212> PRT <213> Enterobacter cloacae <400> 9784 Arg Pro Arg Glu Lys Lys Asn Gly Gly Thr Arg Met Ile Pro Leu Thr His Gly Leu Ile Leu Ala Ala Ile Leu Phe Val Leu Gly Leu Thr Gly Leu Val Ile Arg Arg Asn Leu Leu Phe Met Leu Ile Gly Leu Glu Ile 40 Met Ile Asn Ala Ser Ala Leu Ala Phe Val Val Ala Gly Ser Tyr Trp Gly Gln Thr Asp Gly Gln Val Met Tyr Ile Leu Ala Ile Ser Leu Ala 70 Ala Ala Glu Ala Ser Ile Gly Leu Ala Leu Leu Gln Leu His Arg 90 85 Arg Arg Gln Asn Leu Asn Ile Asp Ser Val Ser Glu Leu Arg Gly

105

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<213> Enterobacter cloacae
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                                 25
Lys Leu Arg Cys Glu Val Phe Val Val Glu Gln Thr Cys Pro Tyr Gln
                             40
                                                 45
Asp Ile Asp Gly Asp Asp Leu Val Gly Glu Asn Arg His Ile Leu Gly
Trp Arg Asp Asn Glu Leu Val Ala Tyr Ala Arg Ile Leu Lys Ser Glu
                    70
Glu Glu Phe Asp Pro Val Val Ile Gly Arg Val Ile Ile Ser Gly Arg
                                     90
Ala Arg Gly Glu Lys Leu Gly Tyr Gln Leu Met Glu Lys Thr Leu Asp
Ala Cys Gln Lys Gln Trp Pro Asp Lys Ala Leu Tyr Leu Gly Ala Gln
                            120
Ala His Leu Gln Ser Phe Tyr Gly His Phe Gly Phe Thr Pro Val Thr
                        135
Asp Ile Tyr Asp Glu Asp Gly Ile Pro His Ile Gly Met Ala Arg Glu
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Ala Lys Gln Ala Gln
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<211> 69
<212> PRT
<213> Enterobacter cloacae
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Pro Gly Arg Trp Arg Ser Arg Arg Cys His Val Arg Arg Gly Asn Ser
                                 25
Pro Lys Arg Ser Ala Arg Arg Ser Val Lys Pro Gly Trp Arg Thr Val
                            40
                                                 4.5
Ser Ala Asn Ile Phe Pro Ser Arg Asp Asn Phe Leu Ser Val Thr Ala
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Trp Trp Cys Ala
<210> 9787
<211> 323
<212> PRT
<213> Enterobacter cloacae
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Gln Pro Gly Ser Cys Cys Arg Glu Ser Gly Ser Asp Thr Ala Leu Ser
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Asn Lys Gly His Ala Met Ile Tyr Pro Asp Glu His Met Leu Tyr Ala
                            40
Pro Val Glu Trp Gln Asp Cys Ser Glu Gly Tyr Thr Asp Ile Arg Tyr
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His Lys Ser Ala Asp Gly Ile Ala Lys Ile Thr Ile Asn Arg Pro Gln
                    70
                                         75
Val Arg Asn Ala Phe Arg Pro Leu Thr Val Lys Glu Met Ile Gln Ala
                                     90
Leu Ala Asp Ala Arg Tyr Asp Asp Thr Val Gly Val Ile Ile Leu Thr
                                105
Gly Glu Gly Glu Lys Ala Phe Cys Ser Gly Gly Asp Gln Lys Val Arg
                            120
                                                125
        115
Gly Asp Tyr Gly Gly Tyr Gln Asp Asp Ala Gly Thr His His Leu Asn
                        135
                                            140
Val Leu Asp Phe Gln Arg Gln Ile Arg Thr Cys Pro Lys Pro Val Val
                                         155
                    150
Ala Met Val Ala Gly Tyr Ser Ile Gly Gly Gly His Val Leu His Met
                                    170
                165
Met Cys Asp Leu Thr Ile Ala Ala Glu Asn Ala Ile Phe Gly Gln Thr
            180
                                185
                                                     190
Gly Pro Lys Val Gly Ser Phe Asp Gly Gly Trp Gly Ala Ser Tyr Met
        195
                            200
                                                 205
Ala Arg Ile Val Gly Gln Lys Lys Ala Arg Glu Ile Trp Phe Leu Cys
                        215
                                             220
Arg Gln Tyr Asn Ala Gln Glu Ala Leu Asp Met Gly Leu Val Asn Thr
                    230
                                         235
Val Val Pro Ile Ala Asp Leu Glu Lys Glu Thr Val Arg Trp Cys Arg
                                    250
Glu Met Leu Gln Asn Ser Pro Met Ala Leu Arg Cys Leu Lys Ala Ala
                                265
Leu Asn Ala Asp Cys Asp Gly Gln Ala Gly Leu Gln Glu Leu Ala Gly
                            280
Asn Ala Thr Met Leu Phe Tyr Met Thr Glu Glu Gly Gln Glu Gly Arg
                        295
                                            300
Asn Ala Phe Asn Glu Lys Arg Gln Pro Asp Phe Ser Lys Tyr Lys Arg
                    310
Asn Pro
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<210> 9788
<211> 397
<212> PRT
<213> Enterobacter cloacae
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<400> 9788 Leu Leu Arg Leu Gly Arg Arg Leu Tyr Gly Asp Asp Arg Gln Arg 10 Ala Gly Gly Ser Ala Ala Gly Cys Cys Asp Asp Arg Glu Thr Ser 25 Pro Arg Gly Ser Ala Gly Ala Ser Ser Ile Arg Ser Ile Ala Met Lys 40 Leu Thr Pro Leu Thr Thr Gly Leu Leu Leu Ala Gly Leu Met Thr Gly 55 Ser Ala Leu Ala Ala Asp Lys Ile Val Ile Ala His Arg Gly Ala Ser 70 75 Gly Tyr Leu Pro Glu His Thr Leu Pro Ala Lys Ala Met Ala Tyr Ala 90 Gln Gly Ala Asp Tyr Leu Glu Gln Asp Leu Val Met Thr Lys Asp Asp 105 Gln Leu Val Val Leu His Asp His Tyr Leu Asp Arg Val Thr Asp Val 120 Ala Glu Arg Phe Pro Asp Arg Ala Arg Lys Asp Gly Arg Tyr Tyr Ala 135 140 Ile Asp Phe Thr Leu Asp Glu Ile Arg Ser Leu Lys Phe Thr Glu Gly 155

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Phe Glu Ile Glu Asn Gly Lys Lys Val Gln Val Tyr Pro Gly Arg Phe
                                    170
                165
Pro Met Gly Lys Ser Asp Phe Arg Ile His Thr Phe Gln Glu Glu Ile
            180
                                185
Glu Phe Val Gln Gly Leu Asn His Ser Thr Gly Lys Asn Ile Gly Ile
                            200
Tyr Pro Glu Ile Lys Ala Pro Trp Phe His His Gln Glu Gly Lys Asp
                                             220
                        215
Ile Ala Ala Lys Thr Leu Glu Val Leu Lys Gln Tyr Gly Tyr Thr Ser
                                        235
                    230
Lys Lys Asp Lys Val Tyr Leu Gln Cys Phe Asp Ala Ala Glu Leu Lys
                245
                                    250
Arg Ile Lys Thr Glu Leu Glu Pro Lys Met Gly Met Asp Leu Asn Leu
            260
                                265
Val Gln Leu Ile Ala Tyr Thr Asp Trp Asn Glu Thr Gln Glu Lys Gln
                            280
Pro Asp Gly Lys Trp Val Asn Tyr Ser Tyr Asp Trp Met Phe Lys Pro
                        295
                                             300
Gly Ala Met Lys Gln Ile Ala Gln Tyr Ala Asp Gly Ile Gly Pro Asp
                    310
Tyr His Met Leu Val Ala Glu Gly Ser Thr Pro Gly His Val Lys Leu
                325
                                    330
Thr Ala Met Val Lys Glu Ala His Ala Ser Lys Met Gln Val His Pro
                                345
Tyr Thr Val Arg Ala Asp Gln Leu Pro Pro Tyr Ala Thr Asp Val Asn
                            360
Gln Leu Tyr Glu Val Leu Tyr Lys Gln Ala Asp Val Asp Gly Leu Phe
                        375
Thr Asp Phe Pro Asp Lys Ala Val Thr Phe Leu Lys
                    390
<210> 9789
<211> 247
<212> PRT
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<213> Enterobacter cloacae

<400> 9789

Phe Val Arg Lys Met Pro Leu Ala Leu Lys Asn Thr Ser Ala Thr Leu 10 Thr Leu Thr Ser Arg Ala Cys Cys Ser Lys Val Ala Leu Tyr Met Asn 25 Asn Met Asn Val Ile Ile Ala Asp Asp His Pro Ile Val Leu Phe Gly 40 45 Ile Arg Lys Ser Leu Glu Gln Ile Glu Trp Val Asn Val Val Gly Glu 55 Phe Glu Asp Ser Thr Ala Leu Ile Asn Asn Leu Pro Lys Leu Asp Ala 75 70 His Val Leu Ile Thr Asp Leu Ser Met Pro Gly Asp Lys Tyr Gly Asp 90 Gly Ile Thr Leu Ile Lys Tyr Ile Lys Arg His Phe Pro Asp Ile Ser 105 Ile Ile Val Leu Thr Met Asn Asn Pro Ala Ile Leu Ser Ala Val 120 Leu Asp Leu Asp Ile Glu Gly Ile Val Leu Lys Gln Gly Ala Pro Thr 135 Asp Leu Pro Lys Ala Leu Ala Ala Leu Gln Lys Gly Lys Lys Phe Thr 150 155 Pro Glu Ser Val Ser Arg Leu Leu Glu Lys Ile Ser Ala Gly Gly Tyr 170 165 Gly Asp Lys Arg Leu Ser Pro Lys Glu Ser Glu Val Leu Arg Leu Phe 180 185

Ala Glu Gly Phe Leu Val Thr Glu Ile Ala Lys Lys Leu Asn Arg Ser 195

Ile Lys Thr Ile Ser Ser Gln Lys Lys Ser Ala Met Met Lys Leu Gly 210

Val Asp Asn Asp Ile Ala Leu Leu Asn Tyr Leu Ser Ser Val Thr Leu 230

Ser Ala Thr Asp Lys Asp

<210> 9790 <211> 776 <212> PRT

<213> Enterobacter cloacae

<400> 9790 Gly Gly Gly Tyr Phe Leu Phe His Gly Gln Val Lys Thr His Met Asn Gln Ser Leu Leu Val Thr Lys Arg Asp Gly Thr Thr Glu Arg Ile Asn Leu Asp Lys Ile His Arg Val Leu Asp Trp Ala Ala Glu Gly Leu Asn 35 40 Asn Val Ser Ile Ser Gln Val Glu Leu Arg Ser His Ile Gln Phe Tyr Asp Gly Ile Lys Thr Ser Asp Ile His Glu Thr Ile Ile Lys Ala Ala 70 Ala Asp Leu Ile Ser Arg Asp Ala Pro Asp Tyr Gln Tyr Leu Ala Ala 90 Arg Leu Ala Ile Phe His Leu Arg Lys Lys Ala Tyr Gly Gln Phe Glu 105 Pro Pro Lys Leu Tyr Asp His Val Val Lys Met Val Glu Leu Gly Lys 120 Tyr Asp Thr His Leu Leu Glu Asp Tyr Thr Glu Glu Glu Phe Glu Gln 135 140 Met Asn Gly Phe Ile Asp His Trp Arg Asp Met Asn Phe Ser Tyr Ala 150 155 Ala Val Lys Gln Leu Glu Gly Lys Tyr Leu Val Gln Asn Arg Val Thr 170 Gly Glu Ile Tyr Glu Ser Ala Gln Phe Leu Tyr Ile Leu Val Ala Ala 180 185 Cys Leu Phe Ser Asn Tyr Pro Arg Glu Thr Arg Leu Asp Tyr Val Lys 200 205 Arg Phe Tyr Asp Ala Val Ser Thr Phe Lys Ile Ser Leu Pro Thr Pro 215 220 Ile Met Ser Gly Val Arg Thr Pro Thr Arg Gln Phe Ser Ser Cys Val 230 235 Leu Ile Glu Cys Gly Asp Ser Leu Asp Ser Ile Asn Ala Thr Ser Ser 245 250 Ala Ile Val Lys Tyr Val Ser Gln Arg Ala Gly Ile Gly Ile Asn Ala 265 260 Gly Arg Ile Arg Ala Leu Gly Ser Pro Ile Arg Gly Gly Glu Ala Phe 280 285 His Thr Gly Cys Ile Pro Phe Tyr Lys His Phe Gln Thr Ala Val Lys 295 300 Ser Cys Ser Gln Gly Gly Val Arg Gly Gly Ala Ala Thr Leu Phe Tyr 310 315 Pro Met Trp His Leu Glu Val Glu Ser Leu Leu Val Leu Lys Asn Asn 325 330 Arg Gly Val Glu Gly Asn Arg Val Arg His Met Asp Tyr Gly Val Gln 345 Ile Asn Lys Leu Met Tyr Thr Arg Leu Leu Lys Gly Glu Asp Ile Thr

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Leu Phe Ser Pro Ser Asp Val Pro Gly Leu Tyr Asp Ala Phe Phe Ala
                        375
                                            380
Asp Gln Asp Glu Phe Glu Arg Leu Tyr Thr Lys Tyr Glu Lys Asp Asp
                   390
                                        395
Ser Ile Arg Lys Gln Arg Val Lys Ala Val Asp Leu Phe Ser Leu Met
                405
                                    410
Met Gln Glu Arg Ala Ser Thr Gly Arg Ile Tyr Ile Gln Asn Val Asp
            420
                                425
His Cys Asn Thr His Ser Pro Phe Asp Pro Val Val Ala Pro Val Arg
                            440
Gln Ser Asn Leu Cys Leu Glu Ile Ala Leu Pro Thr Lys Pro Leu Asp
                        455
                                            460
Asp Val Asn Asp Glu Asn Gly Glu Ile Ala Leu Cys Thr Leu Ser Ala
                    470
                                        475
Phe Asn Leu Gly Ala Ile Lys Ser Leu Asp Glu Leu Glu Glu Leu Ala
                                    490
                485
Val Leu Ala Val Arg Ala Leu Asp Ala Leu Leu Asp Tyr Gln Asp Tyr
            500
                                505
                                                     510
Pro Ile Pro Ala Ala Lys Arg Gly Ala Met Gly Arg Arg Thr Leu Gly
                            520
                                                525
Ile Gly Val Ile Asn Phe Ala Tyr Trp Leu Ala Lys Asn Gly Lys Arg
                        535
                                            540
Tyr Ser Asp Gly Ser Ala Asn Asn Leu Thr His Gln Thr Phe Glu Ala
                    550
                                        555
Ile Gln Tyr Tyr Leu Met Lys Ala Ser Asn Glu Leu Ala Lys Glu Gln
                565
                                    570
Gly Ala Cys Pro Trp Phe Asn Glu Thr Thr Tyr Ala Lys Gly Ile Leu
            580
                                585
                                                     590
Pro Ile Asp Thr Tyr Lys Lys Asp Leu Asp Ala Ile Val Ser Glu Pro
        595
                            600
Leu His Leu Asp Trp Glu Gly Leu Arg Glu Ser Ile Lys Thr His Gly
                        615
                                            620
Leu Arg Asn Ser Thr Leu Ser Ala Leu Met Pro Ser Glu Thr Ser Ser
                    630
                                        635
Gln Ile Ser Asn Ala Thr Asn Gly Ile Glu Pro Pro Arg Gly His Val
                                    650
Ser Ile Lys Ala Ser Lys Asp Gly Val Leu Arg Gln Val Val Pro Asp
                                665
Tyr Glu Thr Leu Gly Asp Asn Tyr Glu Leu Leu Trp Glu Met Pro Asn
                            680
Asn Asp Gly Tyr Leu Gln Leu Val Gly Ile Met Gln Lys Phe Ile Asp
                        695
                                            700
Gln Ser Ile Ser Ala Asn Thr Asn Tyr Asp Pro Thr Arg Phe Pro Ser
                                        715
                    710
Gly Lys Val Pro Met Gln Gln Leu Leu Lys Asp Leu Leu Thr Ala Tyr
               725
                                    730
Lys Phe Gly Val Lys Thr Leu Tyr Tyr His Asn Thr Arg Asp Gly Ala
                                745
                                                    750
Glu Asp Ala Gln Asp Asp Leu Ala Pro Ser Ile Gln Asp Asp Gly Cys
                           760
Glu Ser Gly Ala Cys Lys Ile
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<211> 407
<212> PRT
<213> Enterobacter cloacae
<400> 9791
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Tyr Thr Thr Phe Ser Gln Thr Lys Asn Asp Gln Leu Lys Glu Pro Met
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Phe Phe Gly Gln Pro Val Asn Val Ala Arg Tyr Asp Gln Gln Lys Tyr
Asp Ile Phe Glu Lys Leu Ile Glu Lys Gln Leu Ser Phe Phe Trp Arg
Pro Glu Glu Val Asp Val Ser Arg Asp Arg Ile Asp Phe Gln Ala Leu
                85
                                    90
Pro Glu His Glu Lys His Ile Phe Leu Ser Asn Leu Lys Tyr Gln Thr
            100
                                105
Leu Leu Asp Ser Ile Gln Gly Arg Ser Pro Asn Val Ala Leu Leu Pro
                            120
        115
                                                 125
Leu Ile Ser Ile Pro Glu Leu Glu Thr Trp Val Glu Thr Trp Ala Phe
                        135
                                             140
Ser Glu Thr Ile His Ser Arg Ser Tyr Thr His Ile Ile Arg Asn Ile
                    150
                                        155
Val Asn Asp Pro Ala Val Val Phe Asp Asp Ile Val Thr Asn Glu Gln
                165
                                    170
Ile Gln Lys Arg Ala Glu Gly Ile Ala His Tyr Tyr Asp Glu Leu Ile
            180
                                185
                                                     190
Glu Met Thr Ser Tyr Trp His Leu Leu Gly Glu Gly Thr His Asn Val
                            200
Asn Gly Lys Thr Val Thr Val Asn Leu Arg Ala Leu Lys Lys Gln Leu
                        215
                                             220
Tyr Leu Cys Leu Met Ser Val Asn Ala Leu Glu Ala Ile Arg Phe Tyr
                    230
                                         235
Val Ser Phe Ala Cys Ser Phe Ala Phe Ala Glu Arg Lys Leu Met Glu
                245
                                    250
Gly Asn Ala Lys Ile Ile Arg Leu Ile Ala Arg Asp Glu Ala Leu His
                                265
Leu Thr Gly Thr Gln His Met Leu Asn Leu Leu Arg Ser Gly Ala Asp
                            280
Asp Pro Glu Met Ala Glu Ile Ala Glu Glu Cys Lys Gln Glu Cys Tyr
                        295
                                             300
Asp Leu Phe Leu Gln Ala Ala Gln Gln Glu Lys Glu Trp Ala Asp Tyr
                    310
Leu Phe Arg Asp Gly Ser Met Ile Gly Leu Asn Lys Asp Ile Leu Cys
                325
                                     330
Gln Tyr Val Glu Tyr Ile Thr Asn Ile Arg Met Gln Ala Val Gly Leu
            340
                                345
Asp Leu Pro Phe Gln Thr Arg Ser Asn Pro Ile Pro Trp Ile Asn Thr
                            360
Trp Leu Val Ser Asp Asn Val Gln Val Ala Pro Gln Glu Val Glu Val
                        375
Ser Ser Tyr Leu Val Gly Gln Ile Asp Ser Glu Val Asn Thr Asp Asp
                    390
Leu Ser Asp Phe Gln Leu
                405
```

<210> 9792

<211> 510

<212> PRT

<213> Enterobacter cloacae

<400> 9792

Leu Thr Glu His Ala Met Asp Thr Trp Ile Tyr Leu Ser Gln Gly Phe
1 5 10 15

Ala Val Ala Met Thr Pro Glu Asn Leu Val Ile Ala Leu Ile Gly Cys
20 25 30

Phe Val Gly Thr Ile Val Gly Leu Leu Pro Gly Leu Gly Pro Ile Asn Gly Val Ala Ile Leu Leu Pro Leu Ala Phe Ala Leu His Leu Pro Ala Glu Ser Ala Leu Ile Leu Leu Ala Thr Val Tyr Ile Gly Cys Glu Tyr Gly Gly Arg Ile Ser Ser Ile Leu Leu Asn Val Pro Gly Asp Ala Ala Ala Ile Met Thr Ala Leu Asp Gly Tyr Pro Met Ala Gln Gln Gly Arg Gly Gly Val Ala Leu Ser Ile Ser Ala Val Ser Ser Phe Phe Gly Ser Leu Ile Ala Ile Gly Gly Ile Ile Leu Phe Ala Pro Ala Leu Ala Gln Trp Ser Leu Ala Phe Gly Pro Ala Glu Tyr Phe Ala Leu Met Val Phe Ala Ile Ala Cys Leu Gly Ser Met Met Ala Gln Asn Pro Leu Lys Ser Phe Leu Ser Ala Leu Ile Gly Leu Ser Leu Ala Thr Val Gly Val Asp Ala Asn Thr Gly Val Tyr Arg Phe Thr Phe Asp Ser Val His Leu Ser Asp Gly Val Gln Phe Ile Val Val Ile Gly Leu Phe Ser Val Ser Glu Ile Leu Leu Met Leu Glu His Thr Ser Ser Gly Gln Thr Leu Val Arg Lys Thr Gly Arg Met Leu Phe Asn Ala Lys Glu Gly Ala Gln Cys Val Gly Ala Thr Leu Arg Ser Ser Val Ile Gly Phe Phe Val Gly Ile Leu Pro Gly Ala Gly Ala Thr Ile Ala Ser Ala Ile Thr Tyr Met Thr Glu Lys Lys Leu Ser Gly Asn Ser Asp Ser Phe Gly Lys Gly Asp Ile Arg Gly Val Ala Ala Pro Glu Ala Ala Asn Asn Ala Ser Ala Cys Gly Ser Phe Ile Pro Met Leu Thr Leu Gly Val Pro Gly Ser Gly Thr Thr Ala Val Met Met Gly Ala Leu Thr Leu Tyr Asn Ile Thr Pro Gly Pro Ala Met Phe Thr Glu Gln Pro Asp Ile Val Trp Gly Leu Ile Ala Ala Leu Leu Ile Ala Asn Val Met Leu Leu Val Met Asn Ile Pro Leu Ile Gly Leu Phe Thr Arg Met Leu Thr Ile Pro Leu Trp Phe Leu Val Pro Ala Ile Ala Ala Val Ser Ala Val Gly Val Tyr Ala Val His Ser Thr Thr Phe Asp Leu Val Leu Met Val Leu Gly Val Leu Gly Tyr Ile Leu Arg Lys Met His Phe Pro Met Ser Pro Leu Ile Leu Gly Phe Val Leu Gly Glu Met Leu Glu Gln Asn Leu Arg Arg Ala Leu Ser Ile Ser Asn Gly Asn Met Gly Ile Leu Trp Glu Ser Ser Val Thr Lys Ile Leu Leu Ala Met Ala Ile Met Val Ile Val Val Pro Pro Val Leu Arg Trp Ile Arg Arg Arg Gln His Lys Pro Gln Pro Asp Ile Gly 

```
<210> 9793
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 9793
Ala Gly Arg Arg Val Thr Ala Arg Ser Val Arg Cys Gly Val Asp Leu
Ala Thr Gly Ser Cys Val Ser Pro Ser Trp Gly Ser Ser Arg Tyr Thr
            20
                                25
Lys Pro Leu Pro Ile Arg Gln Arg Ala Asp Cys Val Met Glu Leu Ile
                            40
Phe Leu Gly Thr Ser Ala Gly Val Pro Thr Arg Ser Arg Asn Val Thr
                        55
Ala Ile Leu Leu Asp Leu Lys His Pro Thr Arg Gly Gly Leu Trp Leu
                    70
                                        75
Phe Asp Cys Gly Glu Gly Thr Gln His Gln Met Leu His Thr Ser Tyr
                85
                                    90
His Pro Gly Lys Val Asp Lys Ile Phe Ile Thr His Leu His Gly Asp
            100
                                105
His Leu Phe Gly Leu Pro Gly Leu Leu Cys Ser Arg Ser Met Ala Gly
                            120
Asn Ala Asn Pro Leu Thr Ile Tyr Gly Pro Ala Gly Ile Gln Glu Phe
                        135
                                            140
Val Glu Thr Thr Leu Arg Leu Ser Gly Ser Trp Thr Asp Tyr Pro Leu
                    150
                                        155
Glu Val Val Glu Ile Gly Glu Gly Leu Val Phe Asp Asp Gly Asp Tyr
                                    170
Gln Val Arg Ala Tyr Pro Leu Asn His Pro Val Glu Cys Tyr Gly Tyr
                                185
                                                     190
Arg Val Glu Glu His Asp Lys Pro Gly Ala Leu Asn Ala Ala Leu
                            200
Gln Ala Asp Gly Val Lys Pro Gly Pro Leu Phe Gln Arg Leu Lys His
                        215
Gly Glu Thr Val Thr Leu Glu Asp Gly Arg Val Ile Asn Gly Gln Asp
                    230
                                        235
Tyr Leu Ala Pro Pro Gln Pro Gly Lys Lys Leu Ala Ile Phe Gly Asp
                                    250
                245
Thr Ala Pro Cys Pro Ser Ala Leu Arg Leu Ala Gly Gly Val Asp Val
                                265
Met Val His Glu Ala Thr Leu Glu Ala Ala Met Glu Glu Lys Ala Asn
                            280
Ser Arg Gly His Ser Ser Thr Arg Gln Ala Ala Gln Leu Ala Arg Glu
                        295
Ala Gly Val Arg Lys Leu Ile Val Thr His Val Ser Ser Arg Tyr Asp
                    310
                                        315
Val Arg Gly Ala Glu Ser Leu Leu Ala Glu Cys Arg Glu Val Phe Pro
                325
                                    330
Ala Cys Glu Leu Ala Glu Asp Phe Ala Gln Val Ser Val
                                345
<210> 9794
<211> 248
<212> PRT
<213> Enterobacter cloacae
<400> 9794
Gly Val Lys Ala Pro Met Asn Ala Glu Lys Ser Pro Val Ala His Asn
                                   10
Val Asp His Glu Glu Ile Ala Lys Phe Glu Ala Val Ala Ser Arg Trp
```

```
Trp Asp Leu Glu Gly Glu Phe Lys Pro Leu His Arg Ile Asn Pro Leu
                            40
Arg Leu Gly Tyr Ile Ala Glu Arg Ser Gly Gly Leu Phe Gly Lys Lys
                        55
Val Leu Asp Val Gly Cys Gly Gly Gly Ile Leu Ala Glu Ser Met Ala
                    70
                                        75
Arg Glu Gly Ala Thr Val Thr Gly Leu Asp Met Gly Phe Glu Pro Leu
                                    90
Gln Val Ala Arg Leu His Ala Leu Glu Ser Gly Ile Gln Val Glu Tyr
                                105
Val Gln Glu Thr Val Glu Glu His Ala Ala Lys His Ala His Gln Tyr
                            120
Asp Val Val Thr Cys Met Glu Met Leu Glu His Val Pro Asp Pro Gln
                        135
                                            140
Ser Val Val Ser Ala Cys Ala Asn Leu Val Lys Pro Gly Gly Gln Val
                    150
                                        155
Phe Phe Ser Thr Ile Asn Arg Asn Gly Lys Ala Trp Leu Met Ala Val
                                    170
                165
Val Gly Ala Glu Tyr Val Leu Arg' Met Val Pro Lys Gly Thr His Asp
            180
                                185
Val Lys Lys Phe Ile Lys Pro Ala Glu Leu Leu Gly Trp Val Asp Gln
                            200
                                                205
Thr Trp Leu Lys Glu Gln His Met Thr Gly Leu His Tyr Asn Pro Leu
                        215
                                            220
Thr Asp Lys Phe Lys Leu Ala Pro Gly Val Asp Val Asn Tyr Met Leu
                    230
                                        235
His Thr Thr Ala Lys Asn Asp
                245
<210> 9795
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 9795
Lys Pro Leu Thr Ser Trp Arg Lys Ser Lys Ala Arg Ala Arg Gly Ser
Thr Lys Pro Leu Thr Arg Lys Ala Phe Cys Arg Ser Thr Pro Ile Lys
Lys Thr Trp Met Arg Ser Ser Ala Ser Arg Cys Thr Ser Thr Gly Lys
Ala Cys Ala Ser Pro Leu Lys Leu Thr Ala Cys Val Thr Pro Arg Ser
   50
Leu Pro
65
<210> 9796
<211> 96
<212> PRT
<213> Enterobacter cloacae
<400> 9796
Cys Arg Pro Arg Pro Leu Arg Arg Ser Pro Thr Pro Leu Thr Val Leu
                                    10
Ser His Arg Ala Gly Thr Ser Ala Leu Lys Arg Arg Lys Thr Ala Cys
                                25
Cys Val Arg Trp Tyr Arg Ile Thr Lys Arg Trp Val Thr Thr Ser
Cys Cys Gly Lys Cys Gln Thr Thr Thr Ala Thr Ser Asn Trp Trp Val
```

Ser Cys Arg Ser Leu Ser Thr Ser Arg Ser Leu Pro Ile Leu Thr Thr

70 75 Thr Arg Arg Ala Ser Arg Pro Ala Arg Tyr Arg Cys Ser Ser Cys 8.5 <210> 9797 <211> 553 <212> PRT <213> Enterobacter cloacae <400> 9797 Met Leu Lys Asn Glu His Arg Gly Lys Ala Met Thr Ile His Asp Pro Arg Tyr Ser Asp Val Ile Ile Gly Gly Gly Ala Thr Gly Ala Gly 25 Ile Ala Arg Asp Cys Ala Leu Arg Gly Leu Ser Val Thr Leu Leu Glu Arg His Asp Ile Ala Thr Gly Ala Thr Gly Arg Asn His Gly Leu Leu 55 His Ser Gly Ala Arg Tyr Ala Val Thr Asp Gly Glu Ser Ala Arg Glu 70 75 Cys Ile Ala Glu Asn Gln Ile Leu Lys Arg Ile Ala Arg His Cys Ile 90 Glu Pro Thr Asp Gly Leu Phe Ile Thr Leu Pro Glu Asp Asp Leu Ala 100 105 110 Phe Gln Ser Thr Phe Ile Thr Ala Cys Thr Ala Ala Gly Ile Gln Ala 120 125 Glu Ala Met Asp Pro Ala Leu Ala Arg Arg Leu Glu Pro Ser Val Asn 135 140 Pro Thr Leu Ile Gly Ala Val Lys Val Pro Asp Gly Thr Val Asp Pro 150 155 Phe Arg Leu Thr Ala Ala Asn Met Leu Asp Ala Arg Glu His Gly Ala 165 170 Gln Ile Leu Thr Gly His His Val Thr Gly Leu Ile Arg Glu Gly Asn 185 Thr Val Arg Gly Val Arg Val Phe Asp Ala Gln Tyr Asn Glu His Arg 200 Glu Leu Tyr Ala Ala Val Val Asn Ala Ala Gly Ile Trp Gly Gln 215 220 Arg Ile Ala Glu Tyr Ala Asp Leu Ser Val Arg Met Phe Pro Ala Lys 230 235 Gly Ser Leu Leu Ile Leu Asp His Arg Ile Asn Asn His Val Ile Asn 245 250 Arg Cys Arg Lys Pro Ser Asp Ala Asp Ile Leu Val Pro Gly Asp Thr 265 Ile Ser Leu Ile Gly Thr Thr Ser Met His Val Asp Tyr Ser Glu Ile 280 285 Asp Tyr Asn Arg Val Thr. Ala Glu Glu Val Asp Ile Leu Leu Arg Glu 295 300 Gly Glu Lys Leu Ala Pro Val Met Ala Gln Thr Arg Ile Leu Arg Ala 310 315 Tyr Ala Gly Val Arg Pro Leu Val Ala Ser Asp Asn Asp Pro Ser Gly 325 330 Arg Asn Val Ser Arg Gly Ile Val Leu Leu Asp His Ala Glu Arg Asp 345 Gly Met Asp Gly Phe Ile Thr Ile Thr Gly Gly Lys Leu Met Thr Tyr 360 365 Arg Leu Met Ala Gln Trp Ala Thr Asp Ala Val Cys Arg Lys Leu Gly 375 380 Asn Thr Ala Pro Cys Val Thr Ala Glu Gln Ala Leu Pro Gly Ser Gln . 390 395

Gln Ser Thr Glu Lys Thr Leu His Lys Ile Ile Ser Leu Pro Ala Pro

405 410 Leu Arg Gly Ser Ala Ile Tyr Arg His Gly Asp Arg Thr Pro Thr Trp 420 425 Leu Gly Glu Gly Arg Leu Ser Arg Ser Leu Val Cys Glu Cys Glu Ala 440 Val Thr Ala Gly Glu Val Gln Tyr Ala Val Glu Asn Leu Thr Val Asn 455 Asn Leu Leu Asp Leu Arg Arg Thr Arg Val Gly Met Gly Thr Cys 470 475 Gln Gly Glu Leu Cys Ala Cys Arg Ala Ala Gly Leu Leu Gln Arg Phe 485 490 His Ala Thr Thr Ser Thr Gln Ser Leu Ala Gln Leu Ser Asp Phe Leu 505 Asn Glu Arg Trp Lys Gly Ile Gln Pro Val Ala Trp Gly Asp Ala Leu 520 Arg Glu Ser Glu Phe Thr Arg Trp Val Tyr Gln Gly Leu Cys Gly Leu 535 540 Glu Lys Glu His Asn His Glu Ile 550 <210> 9798 <211> 440 <212> PRT <213> Enterobacter cloacae <400> 9798 Lys Ser Leu Arg His Arg Leu Gly Ser Gly Arg Val Arg Ser Arg Gly Ala Gly Leu Arg Trp Arg Arg Leu Arg Arg His Arg Ala Ala Cys Arg Gly Ala Asp Tyr Pro Ala Gln Gly Glu Ser Thr Met Asn Asp Thr Arg Phe Glu Ser Cys Ile Lys Cys Thr Val Cys Thr Thr Val Cys Pro Val 55 Ser Gly Val Asp Pro Arg Tyr Pro Gly Pro Lys Gln Ala Gly Pro Asp 70 75 Gly Glu Arg Leu Arg Leu Lys Asp Gly Ala Leu Tyr Asp Glu Ala Leu 90 Lys Tyr Cys Ile Asn Cys Lys Arg Cys Glu Val Ala Cys Pro Ser Asp 105 Val Lys Ile Gly Asp Ile Ile Gln Arg Ala Arg Ala Arg Tyr Ser Thr 120 Gln Lys Pro Thr Leu Arg Asp Ala Ile Leu Ser His Thr Asp Leu Met 135 140 Gly Ser Leu Ser Thr Pro Phe Ala Pro Val Val Asn Ala Ala Thr Ala 150 155 Leu Lys Pro Val Arg Arg Leu Leu Asp Ala Thr Leu Lys Ile Asp His 165 170 His Arg Ser Leu Pro Lys Tyr Ser His Gly Thr Phe Arg Arg Trp Tyr 185 180 190 Lys Ser Val Ala Ala Glu Gln Ala Gln Phe Ala Glu Gln Val Ala Phe 205 200 Phe His Gly Cys Tyr Val Asn Tyr Asn His Pro Gln Leu Gly Lys Asp 215 220 Leu Leu Lys Val Leu Asn Ala Met Gly Thr Gly Val Gln Leu Leu Ser 230 235 Lys Glu Lys Cys Cys Gly Val Pro Leu Ile Ala Asn Gly Phe Ile Asp 250 245 Lys Ala Arg Lys Gln Ala Ser Ser Asn Val Thr Ser Leu Arg Glu Ala 265

Ile Val Asp Lys Gly Ile Pro Val Leu Ala Thr Ser Ser Thr Cys Thr

```
280
Phe Thr Leu Arg Asp Glu Tyr Pro His Leu Leu Asp Val Asp Asn Thr
                        295
                                            300
Gly Leu Arg Glu His Ile Glu Leu Ala Thr Arg Phe Leu Trp Arg Lys
                    310
                                        315
Leu Asp Ser Gly Gln Thr Leu Pro Leu Gly Lys Leu Pro Leu Lys Val
                325
                                    330
Val Tyr His Thr Pro Cys His Met Glu Lys Met Gly Trp Ser Ile Tyr
            340
                                345
                                                     350
Thr Leu Glu Leu Leu Arg Leu Ile Pro Gly Leu Glu Leu Thr Val Leu
                            360
Asp Ser Arg Cys Cys Gly Ile Ala Gly Thr Tyr Gly Phe Lys Arg Glu
                        375
                                            380
    370
Asn Tyr Pro Thr Ser Gln Ala Ile Gly Ala Pro Leu Phe Arg Gln Ile
                    390
                                        395
Glu Glu Ser Gly Ala Asp Ile Val Val Thr Asp Cys Glu Thr Cys Lys
                405
                                    410
Trp Gln Ile Glu Met Ser Thr Ser Lys Arg Cys Glu His Pro Ile Thr
                                425
            420
Leu Leu Ala Lys Ala Leu Ala
<210> 9799
<211> 344
<212> PRT
<213> Enterobacter cloacae
<400> 9799
Lys Ala Ser Ile Ser Leu Glu Gly Arg Met Asp Asn Phe Gln Lys Asp
Ile Asp Asp Arg Ala Asn Leu Thr Leu Ser Asn Arg Phe Glu Leu Leu
                                25
Leu Phe Arg Leu Gly Thr Ser Leu Asn Glu Asn Lys Ser Glu Leu Phe
                            40
                                                45
Gly Ile Asn Val Phe Lys Leu Arg Glu Ile Val Pro Met Pro Thr Phe
                        5.5
Thr Lys Pro Ala Gly Met Lys Ser Pro Leu Met Gly Met Val Asn Ile
                    70
                                        75
Arg Asp Gln Val Ile Pro Val Ile Asp Leu Ala Ala Val Ala Gly Cys
                8.5
                                    90
Lys Pro Ala Thr Gly Leu Asn Ile Leu Leu Ile Thr Glu Tyr Ala Arg
            100
                                105
Ser Val Gln Ala Phe Ala Val Glu Ser Val Glu Asn Ile Met Arg Leu
                            120
                                                125
Asp Trp Lys Gln Val His Ala Ala Glu Thr Ala Val Ser Gly Arg Tyr
                       135
                                            140
Ile Thr Ser Ile Ala Cys Leu Asp Glu Lys Thr Asp Thr Asn Asp Leu
                   150
                                        155
Ala Met Val Leu Asp Val Glu Gln Ile Leu Tyr Asp Ile Thr Pro Ala
               165
                                    170
Asn His Asp Leu His Ala Thr His Leu Glu Thr Thr Lys Phe Asn Ile
                                185
Lys Pro Gly Ser Val Ala Ile Val Ala Glu Asp Ser Lys Val Ala Arg
                            200
Ser Met Leu Glu Lys Gly Leu Gln Ala Met Glu Ile Pro Ala Gln Leu
                        215
                                            220
His Ile Thr Gly Lys Asp Ala Trp Glu Lys Ile Thr Gln Leu Ala Ala
                   230
                                        235
Gln Ala Gln Ala Glu Gly Val Pro Val Thr Asp Lys Ile Ala Leu Val
                245
                                    250
```

Leu Thr Asp Leu Glu Met Pro Glu Met Asp Gly Phe Thr Leu Thr Arg

```
270
            260
                                265
Lys Ile Lys Thr Asp Pro Val Leu Lys Asp Ile Pro Val Val Ile His
                            280
                                               285
Ser Ser Leu Ser Gly Asn Ala Asn Glu Asp His Ile Arg Lys Val Lys
                        295
                                            300
Ala Asp Gly Tyr Val Ala Lys Phe Glu Leu Asn Glu Leu Ser Ser Val
                   310
                                       315
Ile Glu Glu Val Leu Asp Arg Ser Met Lys Lys Ile Glu Gly Pro Leu
                325
                                    330
Ile Ser Arg Lys Gln Leu Ala
            340
<210> 9800
<211> 182
<212> PRT
<213> Enterobacter cloacae
<400> 9800
Tyr Val Ser Trp Asn Asn Trp Gly Ala Ser Cys Ile Thr Pro Asp Glu
                                    10
Arg Phe Ala Ser Gln Glu Phe Asp Leu Phe Leu Thr Asp Asn Pro Ser
            20
                                25
Asn Leu Thr Ala Ser Gly Leu Leu Ser Asp Asp Glu Pro Gly Val
Arg Lys Ile Gly Pro Gly Gln Leu Arg Val Asn Phe Asn Met Ser Asn
    50
                        55
Ala Met Gln Glu Ala Val Leu Gln Leu Ile Glu Glu Asn Leu Ala Gln
Glu Glu Ile Leu Glu Ser Pro Leu Gly Gly Asp Glu Asn Ala Glu Leu
                                    90
His Ala Ser Gly Tyr Tyr Ser Leu Phe Val Asp Thr Val Pro Asp Asp
            100
                                105
Val Lys Arg Leu Tyr Thr Glu Ser Ala Ala Gln Asp Phe Ala Ala Leu
                            120
Ala Gln Thr Ala His Arg Leu Lys Gly Val Phe Ala Met Leu Asn Leu
Val Pro Gly Lys Gln Leu Cys Glu Thr Leu Glu His Leu Ile Arg Glu
                                        155
Lys Asp Ala Ser Gly Ile Glu Lys Tyr Ile Ser Asp Ile Asp Ala Tyr
                                    170
Val Lys Ser Leu Leu
            180
<210> 9801
<211> 351
<212> PRT
<213> Enterobacter cloacae
<400> 9801
Leu Gly Trp Val Phe Thr Phe Arg Arg Thr Phe Thr Val Ala Val Leu
                                    10
Gly Asp Gly Gln Asp Cys Ala Phe Ala Thr Arg Asn Asp Gln Gly Asn
                                25
Asn Gly Val Phe Thr Arg Gln Leu Asp Thr Thr His Ala Gly Arg Arg
                            40
Thr Thr His Cys Ala His Gly Val Leu Phe Lys Ala His His Phe Thr
                        55
Gly Gly Arg Glu Glu His His Phe Ile Arg Thr Gly Arg Gln Ile His
                   70
                                        75
Ala Asp Gln Phe Val Ala Phe Val Gln Val His Arg Asp Asn Pro Gly
```

```
Arg Thr Trp Thr Ala Glu Leu Gly Gln Cys Gly Phe Leu His Gly Thr
           100
                                105
Ala Arg Gly Arg His Lys Asp Val His Ala Leu Phe Val Leu Ala Tyr
                            120
Arg Gln Tyr Gly Gly Asp Thr Phe Val Arg Phe Gln Arg Gln Gln Val
                        135
Asp Asp Trp Thr Ser Thr Arg Ala Thr Ala Cys Phe Arg Gln Leu Ile
                    150
                                        155
Asp Phe His Pro Val Gln Thr Ala Pro Ala Gly Glu Ala Glu Asp Arg
                165
                                    170
Val Met Gly Val Arg His Gln Gln Thr Ile Asn Glu Val Phe Phe Phe
            180
                                185
Asn Thr Arg Arg Arg Phe Ala Phe Thr Ala Pro Thr Leu Ser Phe Val
        195
                            200
Val Gly Gln Arg Leu Ile Leu His Val Ala Leu Val Arg Gln Arg His
                        215
                                            220
   210
Tyr His Val Phe Ala Val Asp Gln Ile Phe Asn Val Asp Ile Arg Ala
                    230
                                        235
225
Val Gly Arg Asp Phe Gly Ala Thr Leu Ile Ala Glu Leu Ile Ala Asn
                245
                                    250
Gln Leu Gln Leu Phe Thr Asp His Phe His Gln Ala Leu Cys Ala Thr
            260
                                265
                                                    270
Gln Asp Met Gln Gln Leu Gly Asn Leu Leu Gln Gln Leu Phe Val Leu
 . 275
                            280
Val Glu Gln Phe Phe Met Leu Lys Ala Gly Gln Phe Leu Gln Thr Gln
                        295
                                            300
Ile Gln Asn Arg Leu Gly Leu Leu Phe Ser Gln Val Val Leu Thr Val
                    310
                                        315
Thr His Ala Glu Phe Arg Leu Gln Pro Leu Arg Thr Arg Ser Val Ile
                325
                                    330
Ala Gly Thr Phe Gln His Arg Arg His Val Ala Gln Ile Pro
            340
                                345
```

<210> 9802

<211> 365

<212> PRT

<213> Enterobacter cloacae

## <400> 9802

Thr Arg Asn Gln Arg Arg Leu Arg Phe Cys Trp Arg Arg Arg Thr Ala 10 Asp Gln Leu Asp Asp Arg Val Asp Val Arg Gln Arg Asn Gly Gln Cys Phe Lys Asp Met Gly Thr Val Ala Arg Phe Ala Gln Phe Glu Asp Gly 40 Thr Ala Ser His His Phe Thr Ala Val Thr His Glu Arg Ala Gln Asp 5.5 Leu Phe Gln Val His Asp Leu Arg Leu Ala Met Val Gln Arg Asn His 70 75 Val Asp Thr Glu Gly Asp Leu Lys Leu Ser Leu Gly Val Lys Val Val 85 90 Gln His Asn Phe Thr His Arg Val Ala Leu Asp Phe Asn His Asp Ala 105 100 His Thr Val Phe Val Arg Leu Val Thr Gln Arg Ala Asp Ala Phe Asn 120 125 Ala Phe Phe Tyr Gln Leu Gly Asp Phe Phe Asn Gln Ser Arg Phe 135 140 Val His Leu Ile Arg Asp Leu Val Asn Asn Asn Gly Phe Thr Ala Gly 150 155 Phe Gly Val Arg Phe His Phe Gly Ala Gly Thr Asp Val Asn Leu Ala 165 170

```
Ala Thr Gly Thr Val Arg Phe Phe Asn Thr Ala Thr Ala Ile Asp Asp
                                185
Cys Arg Arg Glu Val Arg Ala Arg Asp Val Phe His Gln Pro Phe
                            200
Asn Ala Asp Val Phe Ile Val Asn Val Gly Gln Ala Ala Val Asp His
                        215
                                             220
Phe Arg Asp Ile Val Arg Arg Asn Val Gly Cys His Thr Asp Gly Asp
                    230
                                        235
Thr Gly Arg Thr Val His Gln Gln Val Trp Asp Leu Arg Trp His Asp
                245
                                    250
Val Arg Asn Phe Phe Arg Ala Val Val Ile Asn Glu Ile Asn Arg
                                265
            260
Leu Phe Phe Gln Val Ser His Gln Leu Met Gly Asn Leu Arg Gln Thr
                            280
Asp Phe Arg Ile Thr His Cys Arg Gly Gly Val Ala Val Asp Arg Thr
    290
                        295
                                             300
Lys Val Thr Leu Thr Ile Tyr Gln His Val Thr Gln Arg Glu Gly Leu
                    310
                                        315
Arg His Thr Asp Asn Gly Ala Val His Arg Asp Ile Thr Met Arg Met
                325
                                    330
Val Phe Thr Asp Tyr Val Thr Asn Asp Thr Gly Arg Phe Phe Val Gly
            340
                                345
Phe Ile Pro Val Ile Ala Gln Tyr Val His Gly Val
        355
                            360
                                                 365
<210> 9803
<211> 97
<212> PRT
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<213> Enterobacter cloacae

<400> 9803 Ser Gln His Arg Arg Pro Glu Arg Leu Pro Ala Leu Met Thr Arg Val 10 Thr Leu Ser Leu Ser Gly Thr Glu Val Leu Cys Gln Glu Glu His Pro Ser Leu Leu Val Ala Leu Glu Ala His Gln Val Glu Val Glu Tyr Gln 40 Cys Arg Glu Gly Tyr Cys Gly Ser Cys Arg Cys Arg Leu Val Ala Gly 55 Gln Val Asp Trp Leu Thr Glu Pro Leu Ala Phe Ile Ser Glu Gly Glu 75 Ile Leu Pro Cys Cys Cys Arg Ala Lys Gly Asp Ile Glu Ile Glu Met 90

<210> 9804 <211> 443 <212> PRT <213> Enterobacter cloacae

<400> 9804

Thr Ser Ala Gly Lys Ala Phe Ser Pro Ser Pro Gly Ala Met Pro Cys Ala Lys Ala Asn Leu Pro Ala Gly Ser Ile Arg Gly Phe Ala Val Trp 25 Arg Arg Ser Thr Thr Met Lys Phe Asp Thr Val Ile Val Gly Gly Leu Ala Gly Leu Leu Cys Gly Leu Lys Leu Thr Gln Arg Gly Leu Arg Cys Ala Ile Val Thr Arg Gly Gln Ser Ala Leu His Phe Ser Ser Gly

```
70
                                        75
Ser Leu Asp Leu Gly Ala Leu Ser Phe Ala Asp Leu Pro Pro Glu
                85
                                    90
His Pro Tyr Arg Leu Thr Gly Ala Glu Asn Met Ala Arg Phe Ala Cys
                                105
            100
Glu Thr Glu His Leu Leu Thr Ala Cys Gly Ala Arg Met Gln Gly Asp
                            120
Ala Glu Gln Asn His Gln Arq Val Thr Pro Leu Gly Thr Leu Arq Ala
                        135
                                            140
Ala Trp Leu Ser Pro Glu Glu Val Pro Val Ala Pro Ile Ala Ala Glu
                    150
                                        155
Arg Val Arg Val Val Gly Ile Ser Gly Phe Leu Asp Phe Gln Pro His
                165
                                    170
Leu Ala Ala Ala Ser Leu Arg Gln Gln Gly Val Gln Val Asp Thr Ala
            180
                                185
                                                     190
Glu Ile Asp Leu Pro Glu Leu Asp Val Leu Arg Glu Asn Pro Ser Glu
        195
                            200
Phe Arg Ala Val Asn Ile Ala Arg Leu Leu Asp Asn Glu Ser Tyr Trp
    210
                        215
                                            220
Pro Gln Leu Tyr Ala Ala Leu Gln Pro Leu Gly Glu Thr Cys Asp Ala
                    230
                                        235
Leu Phe Met Pro Ala Cys Phe Gly Leu Thr Asp Asn Arg Leu Trp Arg
                245
                                    250
Trp Leu Ser Ala Arg Leu Pro Cys Thr Leu Gly Leu Leu Pro Thr Leu
                                265
Pro Pro Ser Val Pro Gly Ile Arg Leu His Thr Gln Leu Gln Arg Gln
                            280
Phe Val Ala Gln Gly Gly Val Trp Met Ala Gly Asp Glu Val Lys Lys
                        295
                                            300
Ile Thr Leu Val Glu Gly Ala Val Ser Asp Ile Trp Thr Arg Asn His
                    310
                                        315
Gly Asp Ile Pro Leu Arg Ala Arg Tyr Thr Val Leu Ala Ser Gly Ser
                                    330
Phe Phe Ser Asn Gly Leu Leu Ser Ser Arg Asp Gly Val Arg Glu Ala
                                345
Ile Leu Gly Leu Asp Val Arg Gln Ser Ala Ser Arg Ala Asp Trp Tyr
                            360
Gln Ser Asp Phe Phe Thr Pro Gln Pro Trp Gln Gln Phe Gly Val Ile
                        375
Val Asp Ser Gln Leu Arg Pro Arg Leu Gly Gly Glu Pro Val Glu Asn
                    390
                                        395
Leu Tyr Ala Ile Gly Ser Val Leu Gly Gly Tyr Asp Pro Val Ala Gln
                405
                                    410
Gly Cys Gly Gly Val Cys Ala Val Thr Ala Leu His Val Ala Glu
                                425
            420
Gln Ile Ile Gln Arg Arg Glu Arg Ala Gln
```

<210> 9805

<211> 328

<212> PRT

<213> Enterobacter cloacae

#### <400> 9805

Thr Met Lys Lys Gln Leu Leu Ser Thr Leu Ala Ala Ser Val Leu Leu leu Ser Ala Ser Val Val Gln Ala Gln Asp Ala Pro Ser Arg Thr Glu 20 25 30 Cys Ile Ala Pro Ala Lys Pro Gly Gly Gly Phe Asp Leu Thr Cys Lys 35 40 45 Leu Ile Gln Val Ser Leu Leu Glu Thr Lys Ala Ile Glu Lys Pro Met

```
55
                                             60
Arg Val Thr Tyr Met Pro Gly Gly Val Gly Ala Val Ala Tyr Asn Ala
                    70
                                        75
Ile Val Ala Gln Arg Pro Ala Glu Ala Gly Thr Val Val Ala Phe Ser
                85
                                    90
Gly Gly Ser Leu Leu Asn Leu Ser Gln Gly Lys Phe Gly Arg Tyr Asp
                                105
Val Asn Asp Val Arg Trp Leu Ala Thr Val Gly Thr Asp Tyr Gly Met
                            120
Ile Ala Val Arg Ala Asp Ser Pro Trp Lys Ser Leu Lys Asp Leu Leu
                        135
Thr Ala Met Glu Lys Asp Pro Asn Ser Val Val Ile Gly Ala Gly Ala
                    150
                                        155
Ser Ile Gly Ser Gln Asp Trp Met Lys Ala Ala Leu Leu Ala Gln Gln
                165
                                    170
Ala Lys Val Asp Pro His Lys Met Arg Tyr Val Ala Phe Glu Gly Gly
            180
                                185
Gly Glu Pro Val Thr Ala Leu Met Gly Asn His Val Gln Ala Val Ser
                            200
                                                 205
Gly Asp Leu Ser Glu Met Val Pro Tyr Leu Ser Gly Asp Lys Ile Arg
                        215
                                            220
Val Leu Ala Val Phe Ser Glu Asn Arg Leu Pro Gly Gln Leu Ala Asp
                    230
                                         235
Val Pro Thr Ala Lys Glu Gln Gly Tyr Asn Leu Val Trp Pro Ile Ile
                245
                                    250
Arg Gly Phe Phe Val Gly Pro Lys Val Thr Asp Ala Glu Tyr Gln Trp
                                265
Trp Val Asp Thr Phe Ala Lys Leu Gln Gln Thr Glu Glu Phe Lys Lys
        275
                            280
Gln Arg Asp Leu Arg Gly Leu Phe Glu Phe Asn Leu Asn Gly Lys Gln
                        295
Leu Asp Glu Tyr Val Lys Lys Gln Val Asn Asp Tyr Arg Val Gln Ala
                    310
                                         315
Lys Ala Phe Gly Leu Ala Lys
```

<210> 9806

<211> 256

<212> PRT

<213> Enterobacter cloacae

#### <400> 9806

Arg Tyr Gln Asp Ser Arg Gln Arg Arg Lys Gly Arg Val Lys Lys Val 10 Ser Glu Val. Leu His Trp Thr Pro Asp His Ala Glu His Lys Gly Lys 25 Met Met Lys Ser Asp Tyr Ala Lys Gln Ile Glu Leu Ile Ser Gly Pro 40 Leu Glu Ala Ala Met Glu Ala Leu Ala Gly Thr Leu Ser Ala Asn Gln 55 60 Glu Ile Val Leu His Asn Leu Thr Thr Pro Glu Gln Ser Val Val Lys 70 75 Ile Ile Asn Gly His Val Ser Gly Arg Lys Ala Gly Asp Asn Leu Leu 85 90 Ser Gly Pro Glu Lys Asp Lys Gly Phe Ala Leu Leu Lys Asn Asn 105 Lys Asp Ser Thr Pro Val Thr Val Lys Asn Tyr Lys Thr Thr Ala 120 Ser Gly Arg Ile Leu Asn Ser Ala Ser Thr Ile Tyr Tyr Ser Glu Glu 135 Gly Val Pro Leu Met Ala Phe Cys Ile Asn Ile Asp Thr Ser Pro Tyr

```
150
                                        155
Glu Gln Met Arg Lys Cys Leu Asp Ala Ile Thr Gly Ser Pro Leu Ala
                                    170
Asp Ser Asp Pro Gln Asp Met Asn Leu Gly Gly Ile Ile Glu Gln Ser
                                185
Ile Gln Glu Ile Ile Asp Lys His Ser Val Pro Gly Lys Lys Val Gln
                            200
Lys Ala Gln Arg Leu Lys Ile Val Ala Glu Met His Ala Lys Gly Ile
                        215
                                            220
Phe Lys Met Arg Gly Gly Val Gln His Ala Ala Gln Ala Leu Gly Val
                    230
                                        235
Thr Arg Tyr Thr Val Tyr Asn Asp Leu Glu Val Met Gly Glu Lys
                                    250
                245
<210> 9807
<211> 116
<212> PRT
<213> Enterobacter cloacae
<400> 9807
Asp Leu Leu Met Thr Leu Thr Lys Ser Phe Ala Ala Leu Met Val Ala
                                    10
Val Ser Ile Glu Val Ile Ala Thr Thr Leu Leu Ser Leu Ser Asn Ser
                                25
Phe Gln Arg Pro Val Val Gly Leu Ser Ala Ile Ile Ser Tyr Gly Leu
Ser Tyr Tyr Phe Leu Ser Ile Ala Leu Arg Arg Ile His Leu Gly Val
Ala Tyr Ala Ile Trp Ser Ala Val Gly Leu Phe Ser Met Thr Val Ile
                    70
Gln Thr Arg Phe Phe Asp Tyr Ile Val Ser Gln Arg Ala Trp Met Gly
                                    90
Leu Gly Met Val Ile Ala Gly Thr Ile Thr Leu Asn Leu Ala Ile Lys
                                105
Gln Asn Lys
        115
<210> 9808
<211> 821
<212> PRT
<213> Enterobacter cloacae
<400> 9808
Lys Ala Ala Phe Trp Lys Arg Ser Glu Leu Ala Ala Ser Ser Pro Gly
                                    10
Trp Arg Ser Ser Pro Phe Asn Arg Arg Asn Gly Met Thr Thr Glu Met
                                25
Leu Ser Leu Arg Val Val Gln Leu Arg Glu Ala Tyr Leu Gln Ala Lys
                            40
                                                4.5
Pro Phe Val Ser Ala His Arg Ala Val Ser Val Thr Gln Val Tyr Lys
                        55
Asp Asn Pro Gly Met Asn Asn Ser Leu Leu Arg Ala Leu Ala Phe Arg
                    70
                                        75
Arg Ala Cys Glu Thr Ala Pro Leu His Val Ala Gln Asn Glu Leu Ile
                85
                                    90
Val Ser His Pro Ala Gly Gly Ala Arg Gly Glu Val Ser Pro Glu
                                105
Ile Ser Trp Arg Trp Leu Ala Asp Glu Leu Glu Thr Leu Pro Ala Arg
                            120
Ala Gln Asp Pro Tyr Gln Ile Asp Glu Glu Thr Lys Arg Leu Leu Arg
```

Glu Glu Val Phe Pro Tyr Trp Gln Gly Arg Ser Leu Asp Glu Met Ala 150 155 Gln Thr Gln Leu Lys Thr His Gly Leu Trp His Trp Cys His Asp Asp 165 170 Gly Ile Cys Asp Val Thr Ile Lys Thr Gln Asn Gly Gly Gly Asp Ser 185 Cys Pro Gly Tyr Asp Asn Ile Leu Leu Thr Lys Gly Ile Lys Gly Ile 200 Arg Glu Glu Ala Ala Ala Leu Leu Leu Ala Leu Asp Pro Ala Thr Pro 215 220 Glu Gly Cys Asp Ala Phe Asn Phe Tyr Thr Ala Met Leu His Thr Cys 230 235 Asp Gly Val Val Thr Tyr Ala Arg Arg Tyr Ala His Tyr Leu Asn Ala 250 245 Leu Ala Glu Lys Glu Gly Asp Pro Leu Arg Arg Asp Glu Leu Leu Gln 260 265 270 Leu Ser Gly Ile Cys Ser Arg Val Pro Glu Gln Pro Pro Gln His Phe 275 280 285 His Asp Ala Leu Gln Ala Ile Trp Phe Val His Ser Leu Phe Met Leu 290 295 300 Glu Glu Asn Gln Thr Gly Ile Ser Leu Gly Arg Val Asp Gln Tyr Leu 310 315 Trp Pro Leu Leu Glu Arg Asp Leu His Asp Gly Thr Leu Asn Leu Gln 325 330 Gln Ala Glu Glu Leu Leu Cys Cys Trp Leu Ile Lys Met Ala Glu Thr 340 345 Leu Trp Ile Cys Ser Glu Ser Thr Ala Met Tyr Phe Ala Gly Tyr Gln 360 Pro Phe Ile Asn Leu Val Val Gly Gly Gln Lys Arg Glu Gly Gly Asp 375 380 Ala Thr Asn Pro Leu Thr Leu Met Ile Met Asp Cys Ser Ala Arg Leu 390 395 Lys Ile Tyr Gln Pro Gly Leu Ala Val Arg Ile His Asn Gln Ser Pro 405 410 Gln Pro Phe Met Arg Lys Val Val Asp Val Val Arg Ser Gly Met Gly 425 Phe Pro Ala Cys His Phe Asp Asp Ala His Ile Arg Met Met Leu His 440 Lys Gly Phe Ser Tyr Glu Asp Ala Arg Asp Tyr Cys Leu Met Gly Cys 455 460 Val Glu Pro Gln Lys Ser Gly Lys Met Tyr Gln Trp Thr Ser Val Gly 470 475 Tyr Thr Thr Phe Thr Ala Ala Ile Glu Leu Ala Leu His Asn Gly Arg 485 490 Thr Gln Asn Gly Lys Gln Cys Gly Pro Ala Thr Gly Asp Val Ser Gln 505 Phe Ser Arg Tyr Glu Glu Val Glu Ser Ala Val Arg Thr Gln Leu Ser 515 520 525 Ala Ile Val Arg Lys Ala Ala Glu Ala Thr Leu Ile Val Gln Lys Leu 535 540 His Ala Glu His Ala Arg Lys Pro Leu Met Ser Cys Leu Ile Glu Gly 550 555 Cys Ile Ala Thr Ala Lys Asp Val Thr Gln Gly Gly Ala Arg Leu Asn 565 570 Ala Gly Pro Gly Leu Ile Trp Thr Gly Leu Ala Asp Cys Val Asn Ser 580 585 590 Leu Met Ala Ile Arg Thr Leu Val Phe Asp Thr Ala Arg Phe Thr Leu 600 605 Arg Gln Leu Val Glu Ala Leu Glu His Asn Phe Val Gly Tyr Gln Glu 615 620 Ile Leu Thr Ala Cys Gln Arg Ala Pro Lys Tyr Gly Asn Asp Ile Arg

```
630
                                       635
Glu Val Asp Asp Ile Ala Arg Glu Leu Val Arg Phe Leu Glu Gln Glu
               645
                                    650
His Arg Gln Tyr Arg Met Leu Tyr Ala Pro Phe Ala Phe Gly Thr Leu
                               665
                                                    670
Ser Ile Ser Asn Asn Thr Pro Phe Gly Leu Ile Thr Gly Ala Leu Pro
                           680
Ser Gly Arg Leu Ala Gly Lys Pro Leu Ala Asp Gly Ile Ser Pro Ala
                        695
                                            700
Gln Gln Thr Asp Tyr Leu Gly Pro Thr Ala Ile Ile Asn Ser Val Ser
                   710
                                        715
Arg Ile Asn Val Glu Glu Met Asp Ile Gly Met Val His Asn Ile Lys
                725
                                    730
Leu Met Phe Gly Met Leu Glu Thr Pro Glu Gly Gln Asn Ser Leu Ile
            740
                                745
His Leu Leu Arg Thr Ala Ser Ile Leu Gly Asn Ala Gln Leu Gln Phe
                            760
Ser Tyr Val Asp Asp Glu Thr Leu Arg Lys Ala Gln Lys His Pro Ala
                        775
    770
                                            780
Asp Tyr Arg Asn Leu Met Ile Arg Val Ala Gly Tyr Ser Ala Phe Phe
                                        795
                    790
Val Glu Leu Ser Lys Glu Val Gln Asp Glu Ile Ile Ser Arg Thr Thr
                805
                                    810
Gln Arg His Phe
            820
<210> 9809
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 9809
Gly Ile Gly Ile Lys Met Lys Lys Leu Val Ala Val Ile Ser Leu Ala
                                    10
Phe Val Thr Leu Thr Val Ala Gly Cys Ser Ser Asp Tyr Val Leu Gln
            20
                                25
Lys Lys Asn Gly Glu Met Ile Ile Thr His Gly Lys Pro Glu Val Asp
Asp Asp Asn Gly Leu Ile Thr Tyr Glu Asp Val Ala Gly Asn Glu His
                        55
Ala Ile Asn Arg Asp Gln Ile Ile Gln Met Ile Glu Lys
                    70
<210> 9810
<211> 383
<212> PRT
<213> Enterobacter cloacae
<400> 9810
Arg Glu Gly Val Ser Ala Gly Ala Glu Arg Gly Tyr Gly Leu Val Arg
                                   1.0
Ser Arg Tyr Glu Val Ala Phe Pro Pro Ser Pro Ser Pro Val Gly Glu
            20
                               25
Gly Val Val Arg Ala Tyr Phe Gln Asp Asn Asp Phe Pro Met Pro His
                            40
                                               45
Leu Ser Thr Arg Val Leu Gln Gly Leu Leu Thr Leu Leu Leu Thr Leu
                        55
                                            60
Phe Gly Leu Leu Val Thr Phe Ala Leu Ser Ala Phe Ser Pro Val
                                     75
                   70
Asp Arg Val Leu Gln Ile Val Gly Asp His Ala Ser Gln Ser Thr Tyr
```

90

```
Asp Gln Val Arg His Gln Leu Gly Leu Asp Arg Pro Leu Pro Val Gln
           100
                                105
Phe Trp His Tyr Leu Gln Asn Leu Ala His Gly Asp Leu Gly Thr Ala
                           120
                                                125
Ser Ala Thr Gly Gln Pro Val Leu Gln Asp Leu Leu His Ala Phe Pro
                        135
                                            140
Ala Thr Leu Glu Leu Ala Thr Leu Ala Leu Ile Ile Gly Thr Val Leu
                    150
                                        155
Gly Val Ile Ala Gly Val Leu Cys Ala Arg Tyr Ala Gly Ser Pro Leu
                                    170
                165
Asp Leu Ala Ile Arg Thr Leu Thr Leu Leu Gly Asn Ser Val Pro Ile
            180
                                185
Phe Trp Leu Gly Leu Leu Met Leu Ala Leu Phe Tyr Ala Lys Leu Gln
                            200
Trp Ser Ala Gly Pro Gly Arg Leu Asp Asp Ile Trp Gln Phe Thr Val
                                            220
                        215
Glu Pro Arg Thr Gly Phe Ala Leu Val Asp Thr Trp Leu Ser Gly Asp
                    230
                                        235
Arg Glu Ala Phe Arg Asn Ala Ile Ser His Leu Val Leu Pro Val Leu
                245
                                    250
Leu Leu Ala Tyr Tyr Ser Leu Ala Ser Ile Thr Arg Leu Thr Arg Ser
            260
                                265
                                                    270
Ala Cys Leu Ser Glu Met Asn Lys Glu Tyr Ile Leu Leu Ala Arg Ala
                            280
                                                285
Lys Gly Ala Gly Glu Met Thr Ile Leu Leu Arg His Val Leu Pro Asn
   290
                        295
                                            300
Ile Arg Ser Thr Leu Leu Thr Val Ile Ala Leu Ala Tyr Thr Ser Met
                    310
                                        315
Leu Glu Gly Ala Val Leu Thr Glu Thr Val Phe Ser Trp Pro Gly Ile
                325
                                    330
Gly Arg Tyr Leu Thr Thr Ala Leu Phe Ala Gly Asp Thr Thr Ala Val
                                345
Met Gly Gly Thr Leu Leu Ile Gly Val Cys Phe Val Leu Ile Asn Asn
                            360
Leu Thr Asp Leu Leu Val Arg Ala Thr Asp Pro Arg Val Arg
                        375
```

<210> 9811 <211> 322

<212> PRT

<213> Enterobacter cloacae

# <400> 9811

Leu Pro Thr Ala Cys Arg Ser Phe Leu Thr Ser Gly Gly Leu Pro Pro 10 Phe Gln Ala Gly Arg Phe Cys Leu Pro Ala Trp Pro Leu Thr Cys Trp 25 Ala Met Ala Cys Ala Thr Tyr Trp Ser His Ser Met Thr Glu His Arg 40 4.5 Val Ile Val Asp Ala Leu Asn Ile Asp Tyr Pro Ala Ala Arg Val Val 55 Asn Asn Leu Ser Phe Thr Leu Gly Lys Glu Arg Leu Ala Leu Val Gly 70 75 Glu Ser Gly Ser Gly Lys Ser Met Ser Ala Arg Ala Leu Met Gly Leu 90 Val Arg Lys Pro Gly Ile Val Ser Ala Lys Arg Leu Asn Val Leu Gly 105 Asn Asp Leu Leu Thr Leu Asn Ser Arg Arg Trp Gln Ala Leu Arg Gly 120 Asn Gly Ile Ala Met Val Leu Gln Asp Pro Arg Tyr Ala Leu Asn Pro

```
Val Lys Thr Val Ala Ala Gln Leu Asp Glu Ala Leu Thr Leu His Gln
                    150
                                       155
Arg Leu Pro Arg Ala Glu Arg Leu Ala Arg Ile His Asp Ile Ile Arg
                165
                                    170
Ala Val Gly Leu Asn Glu His Val Leu Gln Arg Tyr Pro Gly Glu Leu
            180
                                185
Ser Gly Gly Met Gly Gln Arg Val Met Ile Ala Ile Ala Leu Val Asn
                            200
Asn Pro Gln Val Leu Ile Ala Asp Glu Pro Thr Ser Ala Leu Asp Ala
                        215
                                            220
Arg Leu Arg Asn Gln Ile Leu Glu Leu Leu Val Gln Gln Cys Glu Ala
                    230
                                        235
Arg Gln Met Ala Met Leu Leu Ile Ser His Asp Leu Pro Leu Val Ala
                                    250
                245
Glu His Cys Asp Arg Val Leu Val Met Tyr Gln Gly Glu Asn Val Asp
            260
                                265
Glu Met Ala Ala Ser Gln Leu Pro Gln Ala Thr His Pro Tyr Thr Arg
        275
                            280
                                                285
Thr Leu Trp Thr Cys Arg Pro Asn Ala Gly Thr Phe Gly Lys Met Leu
                        295
                                            300
Pro Thr Leu Asp Arg Ser Gln Pro Trp Lys Glu Asp Asp Asn Gly Thr
                    310
                                        315
Arg
```

<210> 9812 <211> 298

<212> PRT

<213> Enterobacter cloacae

<400> 9812 Asp Val Phe Asp Met Glu Leu Arg Tyr Leu Arg Tyr Phe Val Ala Val 10 Ala Arg Glu Arg His Phe Thr Arg Ala Ala Lys Ala Leu Gly Ile Ser Gln Pro Pro Leu Ser Gln Gln Ile Lys Arg Leu Glu Glu Glu Val Gly Thr Pro Leu Phe Arg Arg Leu Thr Arg Gly Val Glu Leu Thr Glu Ala Gly Glu Ala Phe Tyr Glu Asp Ala Cys Lys Ile Leu Ala Leu Ser Asp Ala Ala Leu Glu Lys Ala Arg Gly Ile Ala Arg Gly Leu Asn Gly Ser 85 Leu Ser Ile Gly Ile Thr Ser Ser Asp Ala Phe His Pro Lys Ile Phe 105 100 Ala Leu Ile Arg Gln Phe Gln Val Gln Asn Met Ala Val Gln Val His 120 125 Gln Val Glu Ala Asn Met Ser Ser Leu Thr Thr Met Leu Ala Glu Gly 135 140 Glu Leu Asp Ile Ala Phe Val Arg Leu Pro Cys Glu Ser Ser Lys Val 150 155 Phe Glu Leu Lys Ile Leu Asp Arg Glu Pro Met Met Val Ala Leu His 165 170 Arg Asp His Pro Leu Ala Ala Cys Gly Asp Leu Ala Leu Glu Glu Leu 180 185 190 Arg Asp Thr Pro Val Val Leu Phe Pro Gln Glu Val Ala Pro Gly Leu 200 205 Tyr Asp Arg Val Tyr Gly Ser Cys Glu Arg Ala Gly Ile Asp Met Gln 215 220 His Thr Leu Gln Ser Ser Gln Leu Ser Ser Ser Leu Ser Met Val Ser 230 235

Ala Gly Gly Gly Phe Ala Leu Val Pro Lys Ser Met Ala Ala Ile Ser 255

Pro Pro Asn Val Thr Tyr His Ala Leu Arg Ser Pro Glu Leu Tyr Thr 260

Asp Ile Ala Leu Cys Trp Arg Arg Phe Glu Arg Ser Arg Thr Val Lys 275

Arg Phe Leu Ala Met Met Ser Glu Gly 290

<210> 9813

<211> 165

<212> PRT

<213> Enterobacter cloacae

<400> 9813

Ala Ser Ala Ser Ser Leu Ile Ser Ser Arg Leu Asn Ile Pro Ala Arg 10 Arg Leu Ala Ser Thr Ile Ser Pro Ala Thr Ala Phe Cys Ser Ser Leu 20 25 Arg Gln Ala Thr Val Gly Lys Ser Ser Glu Ser Ser Thr Ala Gln Arg 40 Val Ser Arg Ser Ala Ser Thr Thr Arg Cys Ala Cys Gly Thr Ser Gly 55 60 Ser Val Arg Arg Gly Leu Ala Arg Ser Gln Thr Glu Ala Ser Gly Ser 70 Arg Trp Ala Gly Asn Gln Thr Thr Glu Gly Ser Thr Val Ala Pro Leu 85 90 Thr Lys Gly Ala Ser Trp Ala Phe Cys Ser Thr Pro Phe Cys Ser Ala 100 105 110 Gln Thr Thr Val Phe Ser Ser His Arg Ala Arg Ser His Pro Ala Leu 120 Ser Ala Phe Cys Val Val Leu Thr Ala Lys Lys Thr Arg Ser Thr Gly 135 Arg Val Met Thr Leu Gly Ser Val Ser Thr Gly Pro Gly Thr Thr Ile

155

165

150

<210> 9814

Ser Pro Ser Ser

<211> 269

<212> PRT

<213> Enterobacter cloacae

<400> 9814

Trp Val Lys Asn Asn Ser Ser Arg Arg Ile Pro Phe Tyr Gln Val Asp Ala Phe Ser Asp Gly Pro Phe Thr Gly Asn Pro Ala Ala Val Cys Leu 20 25 Leu Asp Ala Trp Pro Glu Gln Lys Val Leu Gln Arg Ile Ala Thr Glu 40 45 Asn Asn Leu Ser Glu Thr Ala Phe Val Val Gln Gln Asp Gly Phe 55 Ala Leu Arg Trp Phe Thr Pro Ala Val Glu Val Asp Leu Cys Gly His 70 75 Ala Thr Leu Ala Ala Ala Ser Val Leu Leu Ser Arg Asp Asp Ala Cys 85 90 Glu Ser Val His Phe Phe Thr Arg Ser Gly Glu Leu Thr Val Thr Ser 100 105 110 His Gly Glu Gln Tyr Thr Leu Asp Phe Pro Gln Ala Ile Pro Ser Arg 120 125 Ile Thr Ala Pro Glu Gly Leu Phe Lys Ala Leu Gly Leu Glu Asn

5359 135 140 Ala Gly Glu Thr Trp Gln Ala Ser Asp Leu Ile Val Val Ile Asp Asp 150 155 Glu Asp Lys Leu Asp Ala Leu Lys Pro Asp Phe Thr Ala Leu Glu Arg 170 Phe Asn Thr Arg Gly Val Val Val Thr Ala Ser Ser Arg Thr Phe Asp 185 Phe Arg Ser Arg Trp Phe Gly Pro Gln Val Gly Val Asn Glu Asp Pro 200 Val Thr Gly Ser Ala His Thr Phe Leu Ala Pro Leu Trp Ser Gln Lys 215 220 Leu Ser Lys Lys Arg Leu His Ala Gln Gln Gly Gly Ser Arg Lys Gly 235 230 Glu Leu Ile Cys Leu Ile Lys Asp Asn Gly Arg Ile Glu Leu Leu Gly 250 245 Lys Ala Ser Leu Met Ile Glu Gly Val Phe Ile Leu 260 <210> 9815 <211> 325 <212> PRT <213> Enterobacter cloacae <400> 9815

Ala Lys Arg Cys Arg Met Arg Leu Ser Ala Glu Arg Arg Ser Gly Ile Ser Glu Gln Ala Tyr Gly Trp Ile Ser Asn Ile Gln Arg Phe Ser Leu 25 His Asp Gly Pro Gly Ile Arg Ser Ile Ile Phe Phe Lys Gly Cys Gln 40 Met Arg Cys Ala Trp Cys Ala Asn Pro Glu Gly Gln Thr Ala Glu Arg Asp Val Phe Phe His Ala Asp Arg Cys Leu His Cys Gly Asn Cys Ala Asp Leu Cys Pro Thr Gly Leu His Ser Met Asn His Asn Val His Val Leu Glu Arg Asp Arg Lys Cys Val Gly Cys Gln Leu Cys Glu Glu Arg 100 105 Cys Pro Ala Ala Ala Leu Asn Ile Val Gly Glu His Val Ser Ala Gln 120 Asn Ala Phe Glu Arg Val Met Ala Asp Glu Ile Trp Phe Arg Gln Ser 135 140 Gly Gly Gly Val Thr Leu Ser Gly Gly Glu Val Ala Met Gln Pro Glu 150 155 Phe Ala Arg Val Leu Ile Glu Gln Leu Lys Ala Glu Asp Ile His Thr 165 170 Ala Ile Glu Thr Ala Gly Tyr Ala Ser Trp His Ala Ile His Gln Ala 185 190 Thr Ala Gly Cys Asp Leu Ile Leu Tyr Asp Leu Lys Ser Ala Glu Asp 200 Val Leu His Thr Arg Phe Thr Gly Val Ser Asn Lys Arg Ile Val Arg 215 220 Asn Leu Ala Arg Leu Leu Gln Gly Gly Gln Gln Ile Ile Arg Ile 230 235 Pro Val Ile Pro His Phe Asn Asp Ala Pro Asp Gln Ala Asp Lys Leu 245 250 Leu Ala Leu Ile Ser Ala Leu Thr Gln Gly Lys Lys Asn Phe Gln Gly 265 270 Val Glu Leu Leu Pro Tyr His Leu Phe Gly Thr Gly Lys Tyr Lys Leu 285 280 Leu Asn Met Glu Tyr Asp Trp Asn Arg Gly Ser Ala Asn Val Asp Asn

300 295 Phe Leu Ser Met Ala His His Tyr Arg Leu Pro Leu Lys Val Ser Gly 315 Thr Leu Ala Gly <210> 9816 <211> 534 <212> PRT <213> Enterobacter cloacae <400> 9816 Asn Asn His Asn Ile Phe Ser Ser Gly Ile Ala Met Thr Lys Lys Leu 10 Leu Pro Leu Leu Val Leu Ala Ala Leu Ser Ser Ala Ala His Ala Ala 25 Thr Pro Pro Asn Thr Leu Val Val Ala Gln Gly Leu Asp Asp Ile Val 40 Ser Leu Asp Pro Ala Glu Ala Asn Glu Leu Ser Ser Ile Gln Thr Val 55 Pro Ser Leu Tyr Gln Arg Leu Val Gln Pro Asp Arg Asp Asn Pro Glu 70 Lys Ile Thr Pro Val Leu Ala Glu Ser Trp Asp Ala Asp Ala Ala Ala 85 90 Lys Thr Leu Thr Ile Lys Leu Lys Pro Asp Ala Lys Phe Ser Ser Gly 100 105 Asn Pro Leu Arg Pro Glu Asp Val Ile Phe Ser Tyr Thr Arg Ala Val 120 Thr Leu Asn Lys Ser Pro Ala Phe Ile Leu Asn Val Leu Gly Trp Asp 135 Ala Ser Asn Ile Ala Ser Gln Leu Lys Lys Val Asp Asp His Thr Leu 150 Thr Leu His Trp Thr Ala Asp Val Ser Pro Ser Val Ala Leu Asn Ile 170 Leu Ser Thr Pro Ile Ala Ser Ile Val Asp Glu Lys Gln Val Ala Ala 185 Asn Val Lys Asp Asp Phe Gly Asn Ala Trp Leu Lys Met His Ser 200 195 Ala Gly Ser Gly Ala Phe Lys Met Arg Val Tyr Gln Pro His Gln Ala 215 220 Ile Val Leu Glu Ala Asn Glu Ser Ala Pro Gly Gly Ala Pro Lys Leu 230 235 Lys Ser Ile Ile Ile Lys Asn Val Pro Asp Pro Ala Ser Arg Arg Leu 250 245 Leu Ile Gln Gln Gly Asp Ala Asp Val Ala Arg Asp Leu Gly Ala Asp 265 270 Gln Ile Ser Ala Leu Ser Gly Lys Pro Gly Val Lys Val Leu Ser Ile 280 285 Pro Ser Ala Glu Gln Asn Tyr Leu Val Phe Asn Thr Gly Asn Ser Ala 295 300 Asn Pro Leu Leu Asn Asn Pro Ala Phe Trp Glu Ala Ser Arg Trp Leu 310 315 Val Asp Tyr Glu Gly Ile Thr Lys Asp Leu Leu Lys Gly Gln Tyr Phe 325 330 Val His Gln Ser Phe Leu Pro Val Gly Leu Pro Gly Ala Leu Glu Asp 345 Asn Pro Phe Thr Phe Asp Pro Ala Lys Ala Lys Ala Ile Leu Ala Lys 360 Ala Gly Ile Lys Asp Ala His Phe Thr Leu Asp Val Glu Asn Lys Pro 375 380

Pro Phe Ile Thr Ile Ala Gln Ser Met Gln Ala Ser Phe Ala Gln Gly

```
390
                                        395
Gly Val Lys Val Asp Leu Leu Pro Ala Ala Gly Ser Gln Val Tyr Ala
                                    410
Arg Val Arg Ala Lys Gln His Gln Ala Ala Ile Arg Leu Trp Ile Pro
            420
                                425
Asp Tyr Phe Asp Ala His Ser Asn Ala Ser Ala Phe Ala Trp Asn Asp
                           440
Gly Lys Ser Ser Thr Val Ala Gly Leu Asn Gly Trp Lys Ile Pro Glu
    450
                        455
                                            460
Leu Asn Lys Ala Thr Leu Ala Ala Val Ala Glu Pro Asp Pro Ala Lys
                    470
                                        475
Arg Leu Asp Leu Tyr Lys Lys Met Gln Glu Gln Leu Gln His Asn Ser
                                    490
                485
Pro Tyr Val Phe Val Asp Gln Gly Lys Thr Gln Ile Val Val Arg Asp
                                505
Asn Val Lys Gly Tyr Gln Gln Gly Leu Asn Ala Asp Met Val Trp Tyr
        515
                            520
                                        . 525
Asp Arg Val Met Lys
   530
<210> 9817
<211> 288
<212> PRT
<213> Enterobacter cloacae
<400> 9817
Cys Ile Arg Val Arg Thr Leu Met Lys Trp Arg Arg Ala Ser Cys Arg
Arg Gln Pro Ile Pro Thr Arg Ala Arg Ser Gly Pro Ala Ala Arg Thr
            20
Pro Gly Arg Leu Ala Arg Cys Cys Arg Arg Ser Thr Val Arg Asn Arg
                            40
Gly Arg Arg Thr Thr Met Ala Leu Val Glu Val Asn Gln Leu Arg Val
Ser Phe Gly Glu Lys Thr Ala Val Ser Ala Ala Ser Phe Ala Ile Glu
                    70
Lys Gly Glu Thr Phe Ser Leu Ile Gly Glu Ser Gly Cys Gly Lys Ser
                                    90
Thr Leu Leu Arg Val Leu Ala Gly Leu Leu Pro Glu Trp Asn Gly His
            100
                                105
Ile Ser Val Leu Gly Glu Asn Leu Arg Pro Gly Arg Arg Phe Glu Gly
                            120
                                                125
Ala Leu Arg Arg Asn Val Gln Met Val Phe Gln Asp Pro Trp Ala Ser
   130
                        135
                                            140
Leu His Pro Asn His Thr Ile Ala Arg Thr Leu Ser Glu Pro Leu Asn
                    150
                                        155
Ile His Gly Glu Ser Gln Val Ala Glu Lys Val Ala Asp Ala Leu Gln
               165
                                    170
Gln Val Gly Leu Ala Ala Asp Ala Gly Arg Arg Tyr Pro His Gln Leu
            180
                                185
                                                    190
Ser Gly Gly Gln Arg Gln Arg Val Ala Ile Ala Arg Ala Leu Leu Leu
                            200
                                                205
Arg Pro Gln Leu Leu Leu Asp Glu Pro Thr Ser Ala Leu Asp Met
                        215
                                            220
Ser Val Gln Ala Glu Ile Leu Asn Leu Leu Asn Arg Leu Lys Ala Gln
                   230
                                        235
His Gly Met Thr Tyr Leu Leu Val Ser His Asp Ala Asp Val Ile Ala
               245
                                    250
His Met Ser Asp Arg Ala Ala Phe Met Ala His Gly Glu Ile Gln Arg
                               265
Val Phe Asp Arg Glu Ala Met Leu Arg Gly Glu His Arg Met Gly
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<210> 9818 <211> 91 <212> PRT <213> Enterobacter cloacae

<400> 9818

 Arg
 Ser
 Asp
 Asp
 Ser
 Ile
 Lys
 Asp
 Leu
 His
 Trp
 Asp
 Ile
 Arg

 Pro
 Ser
 Pro
 His
 Ile
 Ser
 Thr
 Met
 Gln
 Val
 Arg
 Ser
 Thr
 Asp
 Lys
 Pro

 Leu
 Thr
 Leu
 Asn
 Ala
 Ile
 Asn
 Ile
 Ala
 Trp
 Leu
 Ile
 Gln
 Ala
 Thr

 Ser
 His
 Trp
 Leu
 Leu
 Thr
 Thr
 Arg
 Pro
 Tyr
 Lys
 His
 Gln
 Gln
 Arg
 Asp

 Ser
 His
 Trp
 Leu
 Leu
 Thr
 Thr
 Arg
 Pro
 Tyr
 Lys
 His
 Gln
 Glu
 Arg
 Asp

 Ser
 His
 Trp
 Leu
 Leu
 Thr
 Thr
 Arg
 Pro
 Tyr
 Lys
 His
 Gln
 Glu
 Arg
 Asp

 Fer
 His
 Trp
 Leu
 Arg
 Ala
 Val
 H

Trp Ile Phe Arg Arg Ala Val Met Arg Phe 85 90

<210> 9819 <211> 179 <212> PRT <213> Enterobacter cloacae

<213> Enteropacter Cloacae

<400> 9819

Thr Ile Arg Ser Phe Gln Asp Phe Leu Lys Trp Ser Phe Lys Gln Met 10 Ala Ile Pro Ala Tyr Leu Trp Leu Lys Asp Asp Gly Gly Ala Asp Ile Lys Gly Ser Val Asp Ile Tyr Gly Arg Glu Gly Ser Ile Glu Ile Ile 40 Ala Leu Asn His Gly Ile Met Gln Pro Thr Asp Lys His Asn Gly Lys 55 60 Ala Thr Ser Leu Arg Ile His Ser Pro Tyr Ser Phe Asp Lys Glu Ile 75 Asp Ala Ser Ser Pro Tyr Leu Tyr Lys Ala Val Ser Thr Gly Gln Lys 90 Leu Lys Ser Ala Glu Ile Lys Phe Tyr Arg Ile Asn Asp Ala Gly Gln 100 105 Glu Val Glu Tyr Phe Ser Thr Leu Leu Glu Gly Val Lys Ile Ala Ser 120 Val Cys Pro Met Met Leu Asp Ile Lys Asp Pro Asp Tyr Glu Lys His 135 140 Asn His Leu Glu Leu Val Glu Leu Leu Tyr Glu Lys Ile Thr Trp Arg 150 155 Tyr Val Asp Gly Asn Ile Met His Ser Asp Ser Trp Asn Asp Arg Lys

170

Thr Ala

<210> 9820 <211> 251 <212> PRT <213> Enterobacter cloacae

165

```
20
                                25
Ser Thr Val Gly Ser Leu Arg Ile Ile Ala Arg Leu Arg Ala Ile Ala
                            40
Cys Thr Pro Arg Glu Arg Met Met Glu Ile Ile Ala Gly Arg Pro Ser
                        55
Gly Thr Glu Ala Thr Ala Arg Leu Ile Arg Glu Ser Ser Ser Pro
                    70
                                        75
Ile Gly Ile Ser Arg Asn Thr Arg Leu Lys Thr Asn Ser Ala Ala Ile
                                    90
Ile Ala Arg Met Met Ala Lys Ile Ala Leu Pro Ser Leu Ser Ile Cys
                                105
Thr Ser Ser Gly Val Arg Cys Phe Ser Met Pro Ala Ile Ile Trp Leu
                            120
                                                125
Met Trp Pro Ser Ser Val Ser Trp Pro Val Ala Met Thr Thr Pro Thr
                        135
Pro Pro Pro Ala Leu Thr Val Val Pro Glu Lys Thr Arg Phe Val Arg
                    150
                                        155
Ser Pro Ser Gly Asn Ser Pro Leu Ser Gly Phe Val Cys Leu Ser Thr
                165
                                    170
Thr Val Asp Ser Pro Val Arg Ile Ala Ser Ser Thr Arg Lys Leu Cys
            180
                                185
Ala Ser Ile Lys Arg Ile Ser Ala Gly Ile Arg Ser Pro Ala Arg Asn
        195
                            200
Thr Ile Ile Ser Pro Gly Thr Ile Ser Val Val Gly Ile Val Ser Trp
                        215
                                            220
Leu Pro Leu Arg Ile Thr Arg Ala Ser Leu Glu Ser Ile Leu Arg Ile
                    230
                                        235
Leu Phe Arg Asp Phe Ser Ala Leu Leu Ser
                245
```

<210> 9821

<211> 221

<212> PRT

<213> Enterobacter cloacae

<400> 9821

His Ser Ala Leu Gln Arg Ile Lys Ala Arg Val Ser Ile Arg Ala Phe Thr Ile Asp Gly Arg Lys Asn Leu Val Ala Arg Pro Lys Ser Glu Asp Lys Lys Gln Ala Leu Leu Glu Ala Ala Thr Ala Ala Phe Ala Gln Ser Gly Ile Ala Ala Ser Thr Ala Leu Ile Ala Arg Asn Ala Gly Val Ala 55 Glu Gly Thr Leu Phe Arg Tyr Phe Ala Thr Lys Asp Asp Leu Leu Asn Ala Leu Tyr Leu His Leu Lys Gln Asp Leu Cys Gln Thr Met Leu Ala Asn Leu Asp Arg Thr Ile Thr Glu Pro Lys Glu His Thr Arg Asn Ile 105 110 Trp Asn Ser Tyr Val Asp Trp Gly Ile Arg Asn Pro Leu Ala His Ala 120 125 Pro Ile Arg Gln Ile Gly Val Ser Glu Lys Leu Asn Ala Glu Thr Glu 135 140 Gln Ala Val Lys Asp Met Phe Pro Glu Leu His Glu Leu Cys Arg Arg 150 155 Ser Ile Arg Pro Val Phe Met Ser Asp Glu Phe Lys Thr Phe Gly Asp 165 170 Ala Met Phe Leu Ser Leu Ala Glu Thr Thr Met Glu Phe Ala Ala Arg 185 Asp Pro Ser Arg Ala Val Asp Phe Lys Ala Leu Gly Phe Glu Ala Met

200 195 205 Trp Arg Gly Leu Ala Glu Glu Asp Asn His Gly Gln 210 215 <210> 9822 <211> 484 <212> PRT <213> Enterobacter cloacae <400> 9822 Arg Asn Gly Val Thr Met Asn Thr Ser Val Val Ser Pro Gly Arg Ala Gly Leu Ile Leu Leu Thr Gly Gln Met Leu Pro Leu Ile Asp Thr 20 25 Ser Ile Thr Asn Val Ala Leu Asp Ser Ile Thr His Ser Leu His Ala 40 Thr Ala Thr Glu Leu Glu Leu Ile Val Ala Leu Tyr Gly Val Ala Phe 5.5 Ala Val Cys Leu Ala Pro Gly Ser Lys Leu Gly Asp Asn Leu Gly Arg 75 Arg Arg Leu Phe Met Trp Gly Val Ala Cys Phe Gly Leu Ala Ser Leu 85 90 Leu Cys Gly Met Ala Gly Asn Ile Glu Gln Leu Leu Gly Ala Arg Ile 105 100 Ile Gln Gly Ala Gly Ala Ala Leu Ile Met Pro Gln Ile Leu Ala Thr 125 120 115 Leu His Val Thr Leu Lys Gly Thr Ala His Ala Lys Ala Ile Ser Leu 135 140 Phe Gly Gly Ile Gly Gly Ile Ala Phe Ile Val Gly Gln Met Gly Gly 150 155 Gly Trp Leu Val Ser Ala Asp Ile Ala Gly Leu Gly Trp Arg Asn Ala 165 170 175 Phe Phe Ile Asn Val Pro Ile Cys Leu Val Val Leu Ala Leu Ser Arg 180 185 190 Arg Tyr Val Pro Glu Thr Arg Arg Asp Thr Pro Ser Arg Ile Asp Trp 200 205 Thr Gly Thr Val Leu Leu Thr Ala Ile Leu Cys Cys Leu Leu Phe Pro 215 220 Met Ala Leu Gly Pro Gln Trp His Trp Ser Trp Pro Leu Lys Ala Ala 230 235 Leu Leu Ala Ile Val Pro Leu Val Cys Val Met Val Leu Asn Ala Arg 250 Lys Lys Glu Arg Glu Asn Ala His Pro Leu Ile Ala Pro Arg Leu Leu 265 Gln Leu Arg Ser Ile Arg Phe Gly Val Leu Ile Gly Ile Leu Phe Phe · 275 280 Ser Val Trp Ser Gly Phe Met Phe Cys Met Ala Leu Thr Met Gln Ser 295 300 Gly Leu Gly Met Ala Pro Trp Gln Ser Gly Asn Ser Phe Ile Ala Leu 310 315 Gly Val Thr Tyr Phe Ile Ser Ala Trp Phe Ala Pro Arg Leu Ile Ala 330 325 Arg Tyr Ser Thr Ser Ala Ile Leu Leu Thr Gly Leu Ala Ile Gln Leu 350 340 345 Val Gly Leu Val Ala Leu Ile Ala Thr Phe Arg His Trp Gly Met Gln 360 365 Asn Thr Ala Leu Thr Leu Ala Pro Ala Thr Gly Leu Val Gly Tyr Gly 375 380 Gln Ala Leu Ile Val Asn Ser Phe Tyr Arg Ile Gly Met Arg Asp Ile 390 395

Gln Pro Asp Asp Ala Gly Ala Ala Ser Ala Ile Leu Ser Thr Leu Gln

405 410 Gln Ala Ala Leu Gly Leu Gly Pro Ala Ile Phe Gly Ala Ile Leu Leu 420 425 His Gly Leu Gln Asn His His Gly Asp Tyr Thr Gln Ala Val Asn Val 440 Phe Leu Met Val Glu Thr Ala Met Met Val Val Leu Ala Leu Ala Thr 455 Leu Arg Met Arg His Arg Leu Cys Leu Pro Val Val Lys Ala Cys Pro 470 Ala Thr Lys <210> 9823 <211> 143 <212> PRT <213> Enterobacter cloacae <400> 9823 Leu Tyr Cys Ile Ala Glu Ser Met Asp Gly Ser Gly Asn Gly Tyr Arg 10 Trp Asn Asn Tyr Ala Gln Ser Gly Asp Gln Ala Lys Gln Ile Thr Pro 20 25 Lys Leu Asn Met Tyr Ile Ile Leu Asn Cys Leu Phe Trp Leu Ile Ile Ser Val Thr Met Glu Val Thr Gly Thr Leu Leu Pro Glu Thr Arg 55 Asn Phe Lys Asn Ile Pro Leu Thr Ile His Cys Leu Thr Cys Tyr Val 70 75 Ile Ser Phe Tyr Ser Leu Ser Met Leu Met Gly Tyr Ile Ser Pro Val 85 90 Met Ala Tyr Ser Ile Trp Ala Gly Leu Gly Ile Val Leu Ile Thr Val 105 Met Ser Ser Leu Phe Tyr Arg Leu Lys Ser Ser Ile Leu Glu Lys Ile 120 Gly Ile Gly Cys Ile Val Thr Gly Leu Ala Ile Ile Ala Phe 130 135 <210> 9824 <211> 293 <212> PRT <213> Enterobacter cloacae <400> 9824 Pro Tyr Arg Pro Ala Cys Ala Gly Asp Arg Ser Gln Gly Ala Leu Met 10 Pro Phe Tyr Leu Phe Leu Arg Arg Leu Arg Arg Ser Pro Ala Ala Phe 25 Cys Gly Leu Ile Ala Ile Ala Leu Leu Val Leu Ile Ser Leu Phe Ala 40 .45 Pro Trp Leu Ala Pro Gln Asp Pro Asn Trp Gln Asp Ala Ala Arg 55 Leu Gln Pro Pro Asn Ala Gln His Trp Leu Gly Thr Asp Ser Tyr Gly 70 75 Arg Asp Leu Leu Ser Arg Leu Ile Tyr Gly Thr Arg Pro Ala Leu Gly 85 90 Leu Val Ala Leu Val Thr Val Ile Thr Leu Pro Ala Gly Leu Leu Val 105 Gly Ile Leu Ser Gly Tyr Tyr Gly Gly Trp Met Glu Arg Ile Leu Met 120 125 Arg Phe Ser Asp Val Val Met Ser Met Pro Arg Leu Ile Leu Ala Phe

135

140

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Ala Phe Val Ala Met Leu Gly Pro Gly Leu Val Asn Gly Ala Leu Ala
                    150
                                        155
Leu Ala Leu Thr Thr Trp Pro Ala Tyr Ala Arg Gln Ala Arg Ser Glu
               165
                                    170
Ile Gln Arg Leu Arg His Ser Asp Tyr Leu Ala Ala Glu Met Met
            180
                                185
Gly Ile Arg Gly Pro Arg Leu Leu Val Gly His Ile Leu Pro Leu Cys
                            200
Leu Pro Ser Ala Ile Val Arg Leu Ala Leu Asp Leu Ala Gly Ile Ile
                        215
                                            220
Leu Ala Ala Gly Leu Gly Phe Leu Gly Leu Gly Ala Arg Pro Pro
                    230
                                        235
Met Ala Glu Trp Gly Ala Met Ile Ala Asp Gly Met Gln Val Ile Phe
                245
                                    250
Asp Gln Trp Trp Ile Ala Ala Ile Pro Gly Gly Ala Ile Leu Phe Ala
            260
                                265
Ser Leu Ala Phe Asn Leu Leu Gly Asp Gly Leu Arg Asp Val Leu Glu
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                                                285
Pro Gln His Asp
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<210> 9825
<211> 380
<212> PRT
<213> Enterobacter cloacae
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Pro Tyr Thr Leu Gly Ile Glu Leu Glu Leu Gln Val Asn Pro Pro
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                                25
Gly Tyr Asp Leu Ser Gln Asp Ser Ser Ala Leu Ile Ala Ala Val Lys
        35
                            40
Asp Asp Ile Lys Gly Glu Val Lys His Asp Ile Thr Glu Ser Met
Leu Glu Ile Ala Thr Gly Val Cys Gln Thr Ile Asp Gln Ala Ala Ala
                    70
Gln Phe Ser Val Met Gln Gln Ser Ile Leu Arg Ala Ala Ala Glu His
                                    90
His Ile Gln Ile Cys Gly Gly Gly Thr His Pro Phe Gln Lys Trp Gln
                                105
Arg Gln Glu Val Cys Asp Asp Glu Arg Tyr Asn Val Thr Leu Glu Arg
                            120
Phe Gly Tyr Leu Ile Leu Gln Ala Thr Val Phe Gly Gln His Val His
                        135
                                            140
Val Gly Cys Arg Thr Gly Asp Asp Ala Ile Tyr Leu Leu His Gly Leu
                    150
                                        155
Ser Arg Phe Val Pro His Phe Ile Ala Leu Ala Ala Ser Pro Tyr
               165
                                    170
Met Gln Gly Thr Asp Thr Lys Phe Ala Ser Ser Arg Leu Asn Ile Phe
                                185
                                                    190
Ser Gly Phe Pro Asp Asn Gly Gln Met Pro Trp Val Asn Ser Trp Gln
                            200
Glu Phe Glu Gly Leu Phe Arg Arg Leu Ser Ser Thr Ser Met Ile Asp
                        215
                                            220
Ser Ile Lys Asp Leu His Trp Asp Ile Arg Pro Ser Pro His Phe Gly
                                       235
                    230
Thr Val Glu Val Arg Val Met Asp Thr Pro Leu Thr Leu Gly His Ala
               245
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250

Ile Asn Ile Ala Gly Leu Ile Gln Ala Thr Ser His Trp Leu Leu Thr 265

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Ala Arg Pro Tyr Lys His Gln Glu Arg Asp Phe Leu Leu Tyr Arg Phe
       275
                            280
Asn Arg Phe Gln Ala Cys Arg Tyr Gly Leu Glu Gly Ile Leu Thr Asp
                        295
                                            300
Val His Thr Gly Glu His Lys Thr Val Ala Glu Asp Ile Ala Trp Leu
                    310
                                        315
Leu Glu Gln Val Ala Pro Ser Ala Glu Lys Leu Gly Ala Thr Ser Ala
                                    330
                325
Ile Lys Glu Ile Ala Leu Leu Lys Gln Gly Lys Ser Glu Ala Gln
            340
                                345
Arg Met Arg Asp Phe Ile Ala Asp Gly Gly Ser Leu Ile Ser Leu Val
                            360
Gln Lys His Cys Glu Leu Trp Ala Thr Ser Pro
   370
                        375
                                            380
<210> 9826
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<211> 89

<212> PRT

<213> Enterobacter cloacae

<400> 9826

Leu Thr Ile Asn Ile Thr Met Lys His Pro Leu Glu Ser Leu Leu Thr 10 Ala Gly Gly Ile Leu Leu Met Ala Leu Leu Ser Cys Leu Leu Pro Ala Pro Ser Leu Gly Leu Val Leu Ala Glu Lys Leu Val Gln Thr Phe His Met Val Asp Leu Asn Gln Leu Tyr Thr Ile Leu Phe Cys Leu Trp Phe Leu Val Leu Gly Ala Ile Glu Phe Phe Ile Leu Arg Phe Ile Trp 70 Arg Arg Trp Phe Ser Leu Ala Ser

<210> 9827

<211> 727

<212> PRT

<213> Enterobacter cloacae

<400> 9827

Phe Tyr Gly Asp Ser Asn Gln Gly Arg Ser Ile Lys Met Phe Lys Asn Asn Lys Ile Met Arg Leu Trp Leu Leu Ser Leu Ala Thr Thr Ser Val 25 Ala Ala Gln Ala Glu Thr Lys Glu Glu Thr Ile Thr Val Thr Gln Gly 40 Val Ser Glu Glu Pro Thr Ala Pro Val Lys Gly Ile Val Ala Thr Lys 55 Thr Leu Ser Ala Thr Lys Thr Ser Ala Glu Ile Val Lys Thr Pro Gln 70 75 Ser Val Ser Val Ile Thr Arg Asp Gln Met Asn Met Gln Asp Val Thr 85 90 Ser Val Ser Gln Ala Leu Arg Tyr Ser Ala Gly Val Phe Thr Glu Tyr 105 Arg Gly Ser Ser Asn Arg Asn Asp Glu Val Phe Val Arg Gly Phe Ser 115 120 125 Tyr Val Pro Lys Phe Leu Asp Gly Leu Ser Phe Gly Ala Thr Ala Ser 135 140 Ser Gln Thr Gly Thr Val Asp Pro Trp Leu Leu Glu Arg Val Glu Leu 150 155 Val Arg Gly Pro Ala Ser Val Leu Phe Gly Gln Val Asn Pro Gly Gly

				165					170					175	
Leu	Ile	Ser	Met 180		Ser	Lys	Arg	Pro 185		Ala	Glu	Ala	Ile 190		Asn
Val	Gln	Phe 195	Arg	Thr	Gly	Asn	Asn 200	Asp	Leu	Ala	Glu	Gly 205	Ala	Phe	Asp
Phe	Gly 210	Gly	Arg	Leu	Ser	Asp 215	Asp	Gly	Arg	Val	Leu 220	Tyr	Arg	Val	Asn
Gly 225	Ile	Ala	Arg	Thr	Gln 230	His	Asn	Gln	Val	Asp 235	Asp	Tyr	Lys	Glu	Thr 240
Arg	Met	Ala	Ile	Ala 245	Pro	Ala	Ile	Thr	Trp 250	_	Pro	Asn	Asp	Gln 255	Thr
Arg	Phe	Thr	Leu 260	Leu	Thr	Ser	Tyr	Gln 265	Lys	Asp	Pro	Asp	Ala 270	Gly	Tyr
		275			Ala		280					285			
	290				Phe	295					300				
305					Met 310					315					320
				325	Arg				330	_				335	
			340		Val			345					350		
		355	-		Gln		360		_			365			=
	370				Glu	375					380				
385					Phe 390					395					400
				405	Gly				410					415	
			420		Val			425					430		
		435			Asp		440	_		_		445	_		
	450				Glu	455					460			_	
465					Asp 470 Trp					475					480
				485	Ile				490					495	
			500		Pro			505					510		
		515			Gly	-	520				_	525			_
	530				Tyr	535					540				
545					550 Trp					555					560
				565	Ile				570	_	_			575	_
_			580		Tyr			585			-		590		
		595			Lys		600					605			
	610			_	Tyr	615			_		620				
625					630 Met					635					640
		<b>-</b> 1		645		9	- 1 -		650		JUL	- 1 -	<b>2-y</b>	655	

 Lys
 Asn
 Thr
 Phe
 Lys
 Val
 Pro
 Ser
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 Asp
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 Tyr
 Asp
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<210> 9828 <211> 193 <212> PRT <213> Enterobacter cloacae

<400> 9828

Lys Thr Cys Ser Arg Asn Cys Met Asn Cys Val Val Arg Ser Ala 1 10 Arg Cys Leu Cys Leu Thr Ser Leu Arg Pro Ser Val Met Gln Cys Ser 20 25 Tyr Arg Trp Leu Lys Pro Pro Trp Ser Leu Pro Pro Ala Ile Arg Pro 35 40 Val Pro Ser Ile Leu Lys Arg Trp Ala Leu Lys Pro Cys Gly Ala Gly 55 Leu Leu Arg Lys Ile Thr Met Asp Ser Lys Ser Leu Gln Glu His Ala 70 75 Arg Arg Val Ala Leu Glu Met Pro Phe Thr Glu His Cys Trp Pro Phe Gly Pro Glu Tyr Asp Val Phe Lys Val Gly Gly Lys Ile Phe Met Leu 100 105 Met Ala Thr Ala His Gly Arg Ala His Val Ser Leu Lys Ser Asp Pro 120 Glu Lys Ser Leu Leu Asn Gln Gln Ile Tyr Arg Gly Val Glu Pro Gly 140 Tyr His Leu Asn Lys Lys His Trp Ile Ser Leu Tyr Gly Thr Asp Asp 150 155 Ile Thr Pro Glu Leu Val Thr Asp Leu Ile Thr Asp Ser Trp Asn Leu 170 Val Val Asp Lys Leu Pro Lys Lys Asp Gln Lys Trp Ile Arg Pro Ala 185

<210> 9829 <211> 258 <212> PRT <213> Enterobacter cloacae

<400> 9829

 Leu
 Phe
 Val
 Ser
 Asp
 Glu
 Gln
 Asn
 Lys
 Arg
 Ser
 Asn
 Arg
 Thr
 Tyr
 Leu

 Phe
 Pro
 Leu
 Arg
 Ala
 Val
 Ile
 Cys
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 Pro
 Phe
 Thr
 Pro
 Ala
 Arg
 Gly
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 Pro
 Phe
 Thr
 Pro
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85 90 Lys Ala Arg Val Ala Lys Ser Ala Ala Gly Thr Tyr Val Phe Asn Glu 100 105 Arg Lys Met Leu Asp Ala Ser His Val Val Phe Cys Ala Lys Thr 120 125 Ala Met Asp Asp Ala Trp Leu Glu Arg Val Val Asp Gln Glu Glu Ala 135 140 Asp Gly Arg Phe Ala Thr Pro Glu Ala Lys Ala Ala Asn His Lys Gly 150 155 Arg Cys Tyr Phe Ala Asp Met His Arg Val Asp Leu Lys Asp Asp Asp 165 170 Gln Trp Met Ala Lys Gln Val Tyr Leu Asn Val Gly Asn Phe Leu Leu 185 180 Gly Val Ala Ala Met Gly Leu Asp Ala Val Pro Ile Glu Gly Phe Asp 200 Ala Ala Ile Leu Asp Glu Glu Phe Gly Leu Lys Glu Lys Gly Phe Thr 215 220 Ser Leu Val Val Pro Val Gly His His Ser Val Glu Asp Phe Asn 230 235 Ala Thr Leu Pro Lys Ser Arg Leu Pro Leu Cys Thr Ile Val Thr Glu 245 250 Cys

<210> 9830 <211> 434

<212> PRT

<213> Enterobacter cloacae

<400> 9830 Ile Cys Ile Ile Asp Pro Gln Pro Pro Leu Trp Gly Cys Ile Asn Thr Gly Asp Val Met Gln Glu Leu Ile Ala Gln Val Glu Glu Leu Gly Ile 20 25 Glu Ile Asn His Thr Thr Ser Leu Val Ile Ile Phe Gly Ile Ile Phe 40 45 Leu Thr Ala Ile Ile Val His Phe Ile Leu His Lys Val Val Leu Arg 55 Ala Phe Glu Lys Arg Ala Gln Ala Ser Ser His Leu Trp Leu Gln Ile 70 Ile Thr Gln Asn Lys Leu Phe His Arg Leu Ala Phe Thr Leu Gln Gly 90 Ile Ile Val Asn Val Gln Ala Val Leu Trp Leu Gln Lys Gly Ser Glu 105 Ala Ala Glu Leu Leu Thr Thr Cys Ala Lys Leu Trp Val Met Val Tyr 120 Ala Leu Leu Ser Phe Phe Ser Leu Leu Asp Val Ile Phe Asn Leu Ser 135 140 Gln Lys Met Ala Thr Ala Ser Gln Leu Pro Leu Lys Gly Ile Phe Gln 150 155 Gly Ile Lys Leu Val Ser Ala Ile Leu Val Gly Ile Leu Ile Ile Ser 170 165 Leu Leu Ile Gly Gln Ser Pro Ala Ile Leu Ile Ser Gly Leu Gly Ala 180 185 190 Met Ala Ala Val Leu Met Leu Val Phe Lys Asp Pro Ile Leu Gly Leu 200 205 Val Ala Gly Ile Gln Leu Ser Ala Asn Asp Met Leu Lys Leu Gly Asp 215 220 Trp Leu Glu Met Pro Lys Tyr Gly Ala Asn Gly Thr Val Thr Asp Ile 235 230 Gly Leu Thr Thr Val Lys Val Arg Asn Phe Asp Asn Thr Ile Thr Thr

245 250 Ile Pro Thr Trp Ala Leu Val Ser Asp Ala Phe Ile Asn Trp Ser Gly 260 265 Met Ser Ala Ser Gly Gly Arg Arg Ile Lys Arg Ser Leu Asn Ile Asp 280 Thr Thr Ser Ile His Phe Leu Asp Glu Gln Gln Gln Lys Leu Ile 295 Gln Ala Lys Leu Leu Lys Pro Tyr Leu Ala Ala Arg His Glu Glu Ile 310 315 Asn Leu Trp Asn Gln Gln Asn Gly Glu Gly Glu Ser Val Leu Asn Leu 325 330 Arg Lys Met Thr Asn Ile Gly Thr Phe Arg Ala Tyr Leu Asn Glu Tyr 340 345 Leu Arg Asn His Pro Arg Ile Arg Lys Asp Met Thr Leu Met Val Arg 360 365 Gln Leu Ala Pro Asp Ala Asn Gly Leu Pro Ile Glu Ile Tyr Ala Phe 370 375 380 Thr Asn Thr Val Ile Trp Ala Glu Tyr Glu Asp Ile Gln Ala Asp Ile 390 395 Phe Asp His Ile Phe Ala Val Val Asp Glu Phe Gly Leu Arg Ile His 405 410 Gln Ser Pro Thr Gly Asn Asp Ile Arg Ser Leu Ala Gly Val Ile Ala 420 425 Gln

<210> 9831 <211> 262

<212> PRT <213> Enterobacter cloacae

<400> 9831

Arg Leu Leu Phe Ser Cys Leu Leu His Leu His Thr Val Leu Arg Tyr Pro Gly Arg Leu Glu Ala Gly Ser Glu Gln Asp Asp Gly Val Thr Ala Pro Glu Gln Thr Gly Phe Pro Ser Cys Val Gln His Ile Ser His Asp 40 Ile Thr Gly Ile Lys Leu Glu Pro Ile Val Ala Leu Ser Ser Arg 55 Ala Val Gly Ala Glu Val Leu Ser Val Leu Ser Pro His Gln Gln Ser 70 75 Glu Ser Phe Phe Gln Asp Trp Ser Ala Thr Arg Ala Leu Val Leu Leu 90 8.5 Glu Ala Gln Ile Ala Ala Leu Lys Asn Pro Phe Pro Cys Asp Asn Leu 105 100 110 Phe Ile Asn Leu Pro Ile Thr Val Leu Thr Ile Pro Glu Met Phe Gln 120 125 Arg Leu Leu Gln Leu Asn Ser Pro Pro Leu Asn Ile Glu Leu Val Glu 135 140 Pro Ala Ser Phe Phe Ser Leu Ser Asp Pro Val Arg Gln Arg Val Ser 150 155 Cys Ala Leu Gln Gln Leu Thr Ala Arg Gly His Arg Ile Trp Leu Asp 170 Asp Ile Asp Glu Ala Ser Gly Gln Ala Phe Leu Ser Cys Arg Leu Pro 185 Leu Cys Gly Ile Lys Ile Asp Lys Ile Ala Phe Trp Arg Leu Arg Glu 200 Thr Pro Ala Leu Thr Gln Leu Val Thr Leu Cys Ser Lys Ile Ala Ala 215

Asn Val Leu Ile Glu Gly Ile Glu Thr Glu Arg Asp Arg Thr Cys Ala

230 235 Leu His Ala Gly Ala Arg Phe Gly Gln Gly Tyr Tyr Trp Pro Ser Trp 245 250 Arg Trp Gln Glu Asp 260 <210> 9832 <211> 99 <212> PRT <213> Enterobacter cloacae <400> 9832 Leu Ile Ser Arg Lys Lys Val Met Lys Lys Thr Thr Ala Ile Leu Met 10 Gly Ala Ala Phe Leu Phe Thr Thr Asn Thr Phe Ala Ala Glu Leu Leu 20 25 Thr Lys Asn Glu Phe Glu Lys Val Glu Ser Gln Tyr Glu Lys Ile Gly 40 Thr Val Ser Thr Ala Asn Glu Val Ser Val Asp Asp Ala Lys Lys Glu 60 Leu Val Glu Lys Ala Asp Lys Glu Gly Ala Asp Val Leu Val Leu Thr 70 75 Ser Gly Asn Thr Asn Asn Lys Ile His Gly Thr Ala Asp Ile Tyr Lys 90 Lys Lys <210> 9833 <211> 662 <212> PRT <213> Enterobacter cloacae <400> 9833 Gln Glu Ala Ala Met Gly Arg Pro Leu Lys Ser Val Phe Lys Lys Glu 10 His Arg Asp Asp Ile Ser Asn Arg Ser Ala Asn Pro Val Phe Ser Glu 25 Val Ala Glu Val Phe Leu Ser Arg Arg Phe Leu Gln Met Gly Ala 40 Val Ala Gly Ala Ala Val Ser Phe Pro Tyr Leu Ile Thr Pro Glu Asn 55 Ala Ile Ala Ala Val Ser Lys Pro Ser Ala Leu Ala Lys Ala Val Ser 70 75 Leu Gly Phe Thr Ser Ile Asp Val Ser Thr Glu Asp Thr Val Arg Val 85 90 Pro Glu Gly Tyr Ile Ala Arg Pro Phe Tyr Arg Trp Gly Asp Pro Thr 105 100 110 Gly Ile Lys Asp Asn Met Pro Ala Phe Lys Pro Asp Ala Ser Asn Thr 120 125 Thr Asp Glu Gln Ala Val Gln Ala Gly Met His His Asp Gly Met Ala 135 140 Trp Phe Ser Leu Pro Gln Gly Ala Gln Asn Pro Glu His Gly Leu Leu 155 Ala Leu Asn His Glu Tyr Ile Asp Asn Gly Met Leu Phe Thr Asp Gly 170 Thr Ala Asn Trp Ser Leu Asp Lys Ala Arg Lys Gly Gln Asn Ala Met 185 Gly Val Ser Val Val Glu Val Lys Lys Thr Gly Ser Gly Trp Glu Val 200 Val Arg Pro Ser Ser Phe Ala Arg Arg Ile Thr Val Asn Thr Pro Met

215

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Gln Leu Thr Gly Pro Ala Arg His Gln Asp Leu Met Lys Thr Ala Ala
                    230
                                       235
Asp Pro Gln Gly Glu Arg Val Leu Gly Thr Met Gln Asn Cys Ala Asn
                245
                                    250
Gly His Thr Pro Trp Gly Thr Tyr Leu Thr Cys Glu Glu Asn Trp Ser
            260
                                265
Asp Ile Phe Val Lys Lys Ala Asp Leu Asn Pro Leu Glu Lys Arg Tyr
                            280
Gly Ile Ser Asp Ser Asp Glu Ser Tyr Arg Trp Asn Glu Val Asp Glu
                        295
                                            300
Arg Phe Ser Val Asp Lys Thr Pro Asn Glu Pro Asn Arg Phe Gly Trp
                    310
                                        315
Val Val Glu Ile Asp Pro Tyr Asn Pro Thr Ser Thr Pro Arg Lys His
                325
                                    330
Thr Ala Leu Gly Arg Phe Lys His Glu Gly Ala Ala Val Thr Leu Ala
            340
                                345
Ala Asp Asn Arg Val Val Val Tyr Met Gly Asp Asp Gln Lys Phe Glu
        355
                            360
                                                365
Tyr Ile Tyr Lys Phe Val Ser Asp Lys Lys Tyr Asp Pro Ala Asn Arg
                        375
                                            380
Glu Ala Asn Met Gln Leu Leu Thr Ser Gly Thr Leu Tyr Val Ala Arg
                    390
                                        395
Phe Asn Glu Asp Gly Ser Gly Asp Trp Leu Pro Leu Ile Phe Gly Gln
                405
                                    410
                                                         415
Asn Gly Leu Asp Lys Ser Asn Gly Phe Ala Ser Gln Gly Asp Leu Leu
            420
                                425
Ile Lys Thr Arg Leu Ala Ala Asp Val Val Gly Ala Thr Lys Met Asp
                            440
Arg Pro Glu Trp Ile Ala Val Asp Pro His Ala Ser Gly Ser Val Tyr
                        455
Cys Thr Leu Thr Asn Asn Ser Asp Arg Gly Lys Glu Gly Lys Ala Pro
                    470
                                        475
Val Asp Ala Ala Asn Pro Arg Ala Asn Asn Val Phe Gly His Ile Met
                                    490
His Trp His Glu Glu Gly Ala Asp Pro Ala Ala Arg Phe Lys Trp
                                505
Asp Ile Leu Val Met Ala Gly Arg Thr Asp Gly Asp Asp Pro Lys Ala
                            520
                                                525
Lys Gly Ser Met Gln Gly Ala Ala Phe Gly Ser Pro Asp Gly Leu Ser
                        535
                                            540
Phe Asp His Gln Gly Val Leu Trp Ile Gln Thr Asp Val Ser Ser Ser
                    550
                                        555
Thr Ile Asn Lys Lys Ala Tyr Glu Gly Met Gly Asn Asn Gln Met Val
                565
                                    570
Ala Thr Ile Pro Gly Thr Asn Glu Tyr Arg Arg Phe Leu Thr Gly Pro
                                585
Arg Gly Cys Glu Ile Thr Gly Ile Ala Phe Thr Pro Asp Asn Arg Thr
                            600
                                                605
Leu Phe Ile Asn Ile Gln His Pro Gly Glu Gly Gly Asp Asp Ile Thr
                        615
                                            620
Asp Pro Ala Asn Pro Arg Ala Val Ser Asn Trp Pro Asp Ala Ser Pro
                   630
                                        635
Asn Gly Arg Pro Arg Ser Ser Thr Val Val Ile Thr Lys Ala Asp Gly
               645
                                    650
Gly Ile Ile Gly Ser
            660
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<sup>&</sup>lt;210> 9834

<sup>&</sup>lt;211> 464

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<400> 9834 Gly Val Lys Asp Ala Ser Ser Ala Ser Gly His Gly Ser Ala Glu Ala 10 Ser Ser Asp Gln Asn Pro Thr Leu Gln Arg Gly Leu Gln Asn Arg His 25 Ile Gln Leu Ile Ala Leu Gly Gly Ala Ile Gly Thr Gly Leu Phe Leu 40 Gly Ile Gly Pro Ala Ile Gln Met Ala Gly Pro Ala Val Leu Leu Gly 55 Tyr Gly Ile Ala Gly Ile Ile Ala Phe Leu Ile Met Arg Gln Leu Gly 70 7.5 Glu Met Val Val Glu Glu Pro Val Ser Gly Ser Phe Ala His Phe Ala 85 90 Tyr Lys Tyr Trp Gly Pro Phe Ala Gly Phe Leu Ser Gly Trp Asn Tyr 100 105 Trp Val Met Phe Val Leu Val Gly Met Ala Glu Leu Thr Ala Ala Gly 120 Ile Tyr Met Gln Tyr Trp Leu Pro Asp Val Pro Thr Trp Ile Trp Ala · 130 135 140 Ala Ala Phe Phe Ile Ile Ile Asn Ala Val Asn Leu Val Asn Val Arg 150 155 Leu Tyr Gly Glu Thr Glu Phe Trp Phe Ala Leu Ile Lys Val Leu Ala 165 170 Ile Ile Gly Met Ile Gly Phe Gly Leu Trp Leu Leu Phe Ser Gly His 180 185 Gly Gly Glu Arg Ala Thr Ile Asp Asn Leu Trp Gln His Gly Gly Phe 200 Leu Ala Thr Gly Trp Lys Gly Leu Ile Leu Ser Leu Ala Val Ile Met 215 220 Phe Ser Phe Gly Gly Leu Glu Leu Ile Gly Ile Thr Ala Ala Glu Ala 230 235 Arg Asp Pro His Lys Ser Ile Pro Lys Ala Val Asn Gln Val Val Tyr 250 Arg Ile Leu Leu Phe Tyr Ile Gly Ser Leu Val Val Leu Leu Ala Leu 265 Tyr Pro Trp Val Glu Val Lys Ser Asp Ser Ser Pro Phe Val Met Ile 280 Phe His Asp Leu Asn Ser Asn Val Val Ala Ser Ala Leu Asn Phe Val 295 Ile Leu Val Ala Ser Leu Ser Val Tyr Asn Ser Gly Val Tyr Ser Asn 315 Ser Arg Met Leu Phe Gly Leu Ser Val Gln Gly Asn Ala Pro Lys Phe 325 330 Leu Thr Arg Val Ser Arg Arg Gly Val Pro Val Asn Ser Leu Phe Leu 345 Ser Gly Ala Ile Thr Ser Leu Val Val Leu Ile Asn Tyr Leu Leu Pro 360 365 Lys Glu Ala Phe Gly Leu Leu Met Ala Leu Val Val Ala Thr Leu Leu 375 380 Leu Asn Trp Ile Met Ile Cys Leu Ala His Leu Arg Phe Arg Ala Ala 390 395 Met Arg Arg Lys Gly Arg Glu Thr Gln Phe Lys Ala Leu Leu Tyr Pro 405 410 Ala Gly Asn Tyr Leu Cys Ile Ala Phe Leu Gly Leu Ile Leu Val Leu 420 425 Met Cys Thr Met Asp Glu Met Arg Leu Ser Ala Met Leu Leu Pro Val 440 Trp Val Val Phe Leu Phe Ile Ala Phe Lys Leu Ser Arg Lys Lys

<210> 9835

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<211> 432
<212> PRT
<213> Enterobacter cloacae
<400> 9835
Ser Ile Thr Phe Tyr Leu Asn Cys Phe Val Ile Asp Tyr Phe Phe Arg
                                    10
Val Arg Leu Ile Met Val Ser Thr Glu Ser Ser Glu Lys Ala Ile Thr
                                25
Gln His Arg Leu Leu Val Pro Arg Leu Ser Leu Met Met Phe Leu Gln
                            40
Phe Phe Ile Trp Gly Ser Trp Ser Val Thr Leu Gly Leu Val Met Thr
                        55
Arg His Asn Met Ser Leu Leu Ile Gly Asp Ala Phe Ser Ala Gly Pro
                    70
Ile Ala Ser Ile Leu Ser Pro Phe Val Leu Gly Met Leu Val Asp Arg
                                    90
Phe Phe Ala Ser Gln Lys Val Met Ala Val Met His Leu Ala Gly Ala
                                105
Val Ile Leu Trp Phe Val Pro Gly Ala Leu Ile Ala Glu Asn Gly Ala
                            120
Leu Leu Ile Gly Leu Leu Phe Gly Tyr Thr Leu Cys Tyr Met Pro Thr
                        135
Leu Ala Leu Thr Asn Asn Ile Ala Phe His Ser Leu Ala Asn Val Asp
                    150
Lys Thr Phe Pro Val Val Arg Val Phe Gly Thr Ile Gly Trp Ile Ala
                                    170
Ala Gly Ile Phe Ile Gly Val Thr Gly Val Ala Ser Ser Val Thr Ile
                                185
Phe Gln Val Ala Ala Val Ser Ser Val Leu Leu Ala Val Tyr Ser Leu
                            200
Thr Leu Pro His Thr Pro Ala Pro Ala Lys Gly Leu Pro Val Lys Val
                        215
Arg Asp Leu Phe Cys Ala Asp Ala Phe Ala Leu Leu Lys Thr Arg His
                    230
                                        235
Phe Phe Val Phe Ser Val Cys Ala Met Leu Ile Ser Val Pro Leu Gly
                                    250
                245
Thr Tyr Tyr Ala Tyr Thr Ala Ser Tyr Leu Ala Asp Ala Gly Ile Ala
                                265
Asp Val Ser Thr Ala Met Ser Phe Gly Gln Met Ser Glu Ile Val Phe
                            280
Met Leu Val Ile Pro Leu Leu Phe Arg Arg Leu Gly Val Lys Val Met
                                            300
                       295
Leu Leu Ile Gly Met Leu Ala Trp Phe Val Arg Tyr Ala Met Phe Ala
                   310
                                        315
Leu Gly Val Ser Glu Glu Gly Arg Ile Leu Leu Tyr Leu Gly Ile Leu
                325
                                    330
Leu His Gly Val Cys Tyr Asp Phe Phe Phe Val Val Gly Phe Ile Tyr
                                345
Thr Asp Arg Val Ala Gly Glu Lys Val Lys Gly Gln Ala Gln Ser Met
                            360
Ile Val Met Phe Thr Tyr Gly Ile Gly Met Leu Leu Gly Ser Gln Ile
Ser Gly Ala Leu Tyr Asn Arg Leu Val Ala Gly Gln Thr Val Pro Gln
                   390
                                        395
Ala Trp Val Thr Phe Trp Trp Ile Pro Ala Val Ala Ala Ala Ile
                                   410
Ala Leu Ile Phe Leu Leu Thr Phe Lys Tyr Asp Asp Asp Lys Ala
            420
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<213> Enterobacter cloacae
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Ser Gln Phe Ile Gly Ala Glu Ala Pro Phe Asn Ser Leu Asp Gly Leu
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Ala Glu Trp Ala Ala Gly Lys Gly Tyr Lys Ala Val Gln Ile Pro Cys
Asn His Pro His Ile Phe Asp Val Glu Lys Ala Ala Glu Ser Gln Ala
                        55
Tyr Cys Asp Asp Ile Thr Ala Arg Leu Ala Ala His Gly Leu Val Ile
                    70
                                         75
Ser Glu Leu Ser Thr His Leu Glu Gly Gln Leu Val Ala Val Asn Pro
                85
                                     90
Val Tyr Ser Glu Ala Phe Asp His Phe Ala Pro Ala Ala Val Arg Gly
            100
                                 105
Asn Glu Ala Ala Arg Arg Ala Trp Ala Thr Glu Lys Leu Lys Gln Ala
                             120
Ala Val Ala Ser Ala Arg Leu Gly Leu Lys Ala His Ala Thr Phe Ser
                        135
                                             140
Gly Ser Leu Ala Trp Pro Phe Phe Tyr Pro Trp Pro Pro His Asn Gln
                    150
                                         155
Gln Arg Phe Gln Glu Ala Phe Glu Glu Leu Ala Thr Arg Trp Arg Pro
                165
                                     170
Ile Leu Asp Thr Phe Asp Glu Gln Gly Val Asp Val Cys Phe Glu Leu
            180
                                 185
His Pro Gly Glu Asp Leu His Asp Gly Val Thr Phe Glu Arg Phe Leu
                             200
        195
Ala Leu Val Asp Asn His Pro Arg Cys Asn Ile Leu Tyr Asp Pro Ser
                         215
                                             220
His Met Leu Leu Gln Gln Met Asp Tyr Leu Ala Phe Ile Asp Ile Phe
                    230
                                         235
His Ala Arg Ile Lys Ala Phe His Val Lys Asp Ala Glu Phe Arg Pro
                                     250
Ser Gly Arg Ser Gly Val Tyr Gly Gly Tyr Gln Pro Trp Ile Asn Arg
                                 265
Ala Gly Arg Phe Arg Ser Pro Gly Asp Gly Gln Ile Asp Phe Lys Gly
                             280
Ile Phe Ser Lys Leu Thr Gln Tyr Asp Tyr Asp Gly Trp Ala Val Leu
                         295
Glu Trp Glu Cys Cys Leu Lys Asp Gly Asp Thr Gly Ala Ser Glu Gly
                    310
                                         315
Ser Glu Phe Ile Arg Arg His Ile Ile Pro Val Ser Gly Arg Ala Phe
                325
                                     330
Asp Asp Phe Ala Ala Gly Gly Cys His Asp
·<210> 9837
<211> 140
<212> PRT
<213> Enterobacter cloacae
<400> 9837
Tyr His Ala Thr Ile Ser Arg Val Val Gly Ile Met Phe Lys Arg Glu
                                    10
Ala Glu Gly Glu Ser Ser Met Thr Ile Ser Ala Gln Val Ile Asp Thr
                                 25
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Ile Val Glu Trp Ile Asp Asp Asn Leu His Gln Pro Leu Arg Ile Glu 40 Glu Ile Ala Arg His Ala Gly Tyr Ser Lys Trp His Leu Gln Arg Leu 55 Phe Met Gln Tyr Lys Gly Glu Ser Leu Gly Arg Tyr Ile Arg Glu Arg 70 75 Lys Leu Leu Met Ala Ala Arg Asp Leu Arg Glu Ser Asp Glu Arg Val 90 Tyr Asp Ile Cys Leu Arg Tyr Gly Phe Asp Ser Gln Gln Thr Phe Thr 100 105 Arg Ile Phe Thr Arg Ile Phe Thr Arg Thr Phe Asn Gln Pro Pro Gly 120 Ala Tyr Arg Lys Glu Asn His Gly Arg Ala His 130 135 <210> 9838 <211> 907 <212> PRT <213> Enterobacter cloacae

<400> 9838 Arg Lys Asn Thr Met Thr Lys Lys Asn Phe Ser Gln Asn Met Pro Pro 10 Ala Gly Gly Gln Ala Tyr Gln Gln Thr Val Glu Gln Val Leu Ala Gln 20 Ala Gln Ser Gln Ala Asn Gly Leu Asp Arg Ala Glu Ala Gln Ala Arg Leu Gln Lys His Gly Pro Asn Ala Leu Pro Glu Lys Lys Gly Lys Pro 55 Gly Trp Leu Arg Phe Leu Ala His Phe Asn Asp Val Leu Ile Tyr Val 70 75 Leu Leu Ala Ala Ala Val Leu Thr Ala Val Met Gly His Trp Val Asp 90 Thr Leu Val Ile Leu Gly Val Ala Val Ile Asn Ala Leu Ile Gly His 105 Ile Gln Glu Ser Asn Ala Glu Lys Ser Leu Lys Ser Ile Arg Asn Met 120 Leu Ser Ser Glu Ala Arg Val Ile Arg Asn Gly Asn His Glu Thr Ile 135 Pro Thr Thr Glu Ile Val Pro Gly Asp Ile Ile Val Leu Arg Ala Gly 150 155 Asp Arg Ile Pro Ala Asp Met Arg Leu Ile Glu Ala His Asn Leu Arg 165 170 Val Glu Glu Ala Ile Leu Thr Gly Glu Ser Thr Val Val Asp Lys His 185 190 Thr Asn Pro Leu Ser Gly Glu Leu Pro Leu Gly Asp Arg Thr Asn Leu 200 205 Val Phe Ser Gly Thr Thr Val Ser Ala Gly Gly Val Gly Val Val 215 220 Ile Ala Thr Gly Gln Glu Thr Glu Leu Gly His Ile Asn Gln Met Met 230 235 Ala Gly Ile Glu Lys His Arg Thr Pro Leu Leu Val Gln Met Asp Lys 245 250 255 Leu Gly Lys Ala Ile Phe Ala Ile Ile Leu Ala Met Met Ala Ala Leu 265 Phe Val Phe Ser Leu Val Phe Arg Glu Ile Pro Met Gly Glu Leu Leu 280 285 Leu Ser Leu Ile Ser Leu Ala Val Ala Ser Val Pro Glu Gly Leu Pro 295 300 Ala Ile Ile Ser Ile Ile Leu Ser Leu Gly Val Gln Ala Met Ala Arg 310 315

Lys Arg Ala Ile Ile Arg Lys Leu Pro Thr Val Glu Thr Leu Gly Ala 330 Met Thr Val Val Cys Ser Asp Lys Thr Gly Thr Leu Thr Met Asn Glu 345 Met Thr Val Lys Ala Ile Ile Thr Ala Asp Thr Cys Tyr Arg Val Asp 360 Gly Asn Ser Tyr Glu Pro Val Gly Asn Ile Tyr Leu Glu Gly Ser Asp 375 Glu Pro Val Gln Ile Gln Pro Gly Thr Val Leu Glu Gln Tyr Leu Arg 390 395 Thr Ile Asp Leu Cys Asn Asp Ser Gln Leu Ile Gln Asp Glu Arg Gly 405 410 Leu Trp Gly Ile Thr Gly Gly Pro Thr Glu Gly Ala Leu Lys Val Leu 420 425 430 Ala Ala Lys Ala His Leu Glu Pro Val Val Thr Thr Leu Val Asn Lys 435 440 Ile Pro Phe Asp Ser Gln Tyr Lys Tyr Met Ser Thr His Tyr Gln Ile 455 460 Gly Gly Glu Glu Gln Ile Leu Ile Thr Gly Ala Pro Asp Val Ile Phe 470 475 Ala Leu Cys Glu Gln Gln Gln Thr Arg Asn Gly Ala Gln Ala Phe Asp 485 490 Arg Ala Tyr Trp Glu Thr Glu Met Glu Arg Tyr Ala Arg Gln Gly Leu 500 505 Arg Met Val Ala Ala Ala Phe Lys Pro Ala Asn Gly Glu Gln Ala Leu 520 Thr His Asp Asp Leu Ser His Gly Leu Ile Phe Leu Gly Ile Ala Gly 535 Met Met Asp Pro Pro Arg Pro Glu Ala Ile Glu Ala Ile Asn Ala Cys 550 555 Gln Gln Ala Gly Ile Arg Val Lys Met Ile Thr Gly Asp His Pro Gln 570. Thr Ala Met Ser Ile Gly Gln Met Leu Gly Ile Thr Asn Ser Glu Gln 585 Ala Val Thr Gly Tyr Gln Leu Glu Lys Met Asp Asp Ala Glu Leu Ala 600 Glu Ala Ala Val Lys Tyr Asp Ile Phe Ala Arg Thr Ser Pro Glu His 615 620 Lys Leu Arg Leu Val Lys Ala Leu Gln Asp Lys Gly Glu Ile Val Gly 630 635 Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ala Leu Arg Gln Ala Asp 645 650 Val Gly Ile Ala Met Gly Ile Lys Gly Thr Glu Val Thr Lys Glu Ala 665 670 Ala Asp Met Val Leu Thr Asp Asp Asn Phe Ala Thr Ile Ala Ser Ala 680 Val Lys Glu Gly Arg Arg Val Tyr Asp Asn Leu Lys Lys Thr Ile Leu 695 700 Phe Ile Met Pro Thr Asn Leu Ala Gln Gly Leu Leu Ile Val Ile Ala 710 715 Leu Leu Ala Gly Asn Ile Ile Pro Leu Thr Pro Val Leu Ile Leu Trp 725 730 Met Asn Met Ala Thr Ser Ala Thr Leu Ser Phe Gly Leu Ala Phe Glu 740 745 Ala Ala Glu Arg Asn Ile Met Arg Arg Pro Pro Arg Gln Thr Gly Gln 760 765 His Val Met Asp Ala Tyr Ala Val Trp Arg Val Ala Phe Val Gly Thr 775 780 Met Ile Ala Ile Ala Ala Phe Ala Leu Glu Ala Trp Leu Ala Pro Arg 790 795 Gly His Ser Ala Glu Phe Ile Arg Thr Val Leu Leu Gln Met Leu Val

805 810 Cys Ala Gln Trp Val Tyr Met Ile Asn Cys Arg Asn Thr Glu Gly Phe 820 825 830 Ser Leu Asn Arg Gly Leu Leu Ala Asn Lys Gly Ile Trp Leu Val Thr 840 845 Gly Val Leu Phe Leu Leu Gln Ala Ala Ile Ile Tyr Leu Pro Phe Met 855 860 Gln Met Leu Phe Gly Thr Glu Ala Leu Pro Leu Arg Tyr Trp Phe Val 870 875 Thr Leu Ala Val Ala Gly Val Met Phe Phe Val Val Glu Ile Glu Lys 885 890 Arg Leu Thr Arg Arg Phe Arg Lys Ala Ala 900 <210> 9839 <211> 364 <212> PRT <213> Enterobacter cloacae

<400> 9839 Gly Lys Thr Thr Pro Arg Tyr Phe Leu Met Lys Leu Pro Leu Leu Phe Ala Leu Leu Ala Cys Thr Leu Gln Pro Ala Phe Ala Ala Val Ile Pro 20 25 Val Arg Val Ala Thr Val Glu Gln Thr Ala His Ala Ala Glu Arg Gln 40 Ile Pro Gly Arg Ile Glu Ala Ile His Thr Val Glu Leu Arg Ala Arg Thr Glu Gly Val Ile Thr Arg Ile His Phe Arg Asp Gly Gln Tyr Val 70 75 Lys Lys Gly Asp Val Leu Phe Glu Leu Asp Asp Ala Glu Pro Arg Ala 90 Ala Leu Arg Leu Ala Gln Ala Glu Val Arg Ser Ala Glu Ala Thr Leu 105 Arg Gln Ala Gln Gln Gln Leu Ser Arg Phe Glu Ser Leu Gly Ser Ser 120 Asn Ala Ile Ser Arg His Asp Val Asp Asn Ala Arg Met Gln Arg Asp 135 140 Val Ala Ser Ala Ala Leu Glu Gln Ala Lys Ala Arg Leu Asp Thr Arg 150 155 Ser Val Thr Leu Asp Tyr Thr Arg Ile Ile Ser Pro Ile Asp Gly Arg 170 165 Val Gly His Ser Asn Phe His Val Gly Ser Leu Val Asn Pro Ala Ser 185 180 190 Gly Val Leu Val Glu Val Val Gln Leu Asp Pro Ile Arg Ile Ala Phe 200 205 Ala Leu Glu Glu Gly Ala Phe Ala Thr Lys Ala Gly Gln His Ala Asp 215 220 Ile Ser Ala Met Lys Gln Ala Trp Gln Ala Leu Ile Asp Ser Asn Gly 230 235 Gln Arg Ile Ser Gly Glu Leu Thr Ser Val Asp Asn Arg Ile Asp Pro 245 250 Arg Thr Ala Ser Val Met Leu Arg Ala Glu Phe Ala Asn Pro Arg His 265 Gln Leu Leu Pro Gly Gly Asn Val Asn Val Tyr Leu Arg Pro Ala Ser 280 Glu Leu Pro Val Leu Thr Leu Pro Ala Ala Ala Val Gln Gln Asn Gly Asp Gly Phe Phe Ala Trp Val Ile Asn Ala Glu Asp Lys Ala Glu Met 310 315 Arg Pro Leu Lys Val Ala Gly Gln Ile Gly Gln Gln Phe Gln Ile Ala

325 330 Ser Gly Val Lys Pro Gly Glu Arg Ala Ile Thr Asp Gly Ala Gln Arg 340 345 Val Gln Pro Gly Val Ala Val Gln Ile Leu Asn <210> 9840 <211> 1055 <212> PRT <213> Enterobacter cloacae <400> 9840 Gly Ala Ile Met Leu Thr Phe Phe Ile Lys Arg Pro Arg Phe Ala Met 10 Val Ile Ala Leu Val Ile Thr Leu Leu Gly Ala Ile Ala Leu Arg Ile 20 25 Ile Pro Val Glu Gln Tyr Pro Gln Ile Thr Pro Pro Val Val Asn Val 40 Ser Ala Ser Trp Pro Gly Ala Ser Ser Ala Asp Val Ala Glu Ala Ile 55 60 Ala Thr Pro Leu Glu Thr Gln Leu Asn Gly Val Asp His Met Leu Tyr 70 75 Met Glu Ser Thr Ser Ser Asp Glu Gly Thr Tyr Ser Leu Asn Ile Thr 90 Phe Ala Ala Gly Thr Asp Pro Asp Leu Ala Ala Ile Asp Val Gln Asn 105 100 Arg Val Ala Gln Ala Val Ala Gln Leu Pro Thr Glu Ala Gln Gln Asn 120 Gly Val Gln Val Arg Lys Arg Ala Thr Asn Leu Met Met Gly Val Ser 135 Leu Tyr Ser Pro Asn Asn Thr His Thr Pro Leu Phe Val Ser Asn Tyr 150 155 Ala Ser Thr Gln Val Arg Glu Ala Leu Ser Arg Leu Pro Gly Val Gly 165 170 Gln Val Gln Met Phe Gly Ala Arg Asp Tyr Ser Met Arg Ile Trp Leu 180 185 190 Arg Pro Asp Arg Met Asn Ala Leu Asn Val Thr Ser Asp Asp Val Ala 200 Gln Ala Leu Arg Glu Gln Asn Val Gln Gly Ala Ala Gly Gln Val Gly 220 215 Thr Pro Pro Val Phe Asn Gly Gln Gln Gln Thr Leu Thr Ile Asn Gly 230 235 Leu Gly Arg Leu Asn Gln Ala Asp Asp Phe Ala Asn Ile Ile Ile Arg 250 245 Ala Gly Glu Met Gly Gln Leu Val Arg Leu Lys Asp Val Ala Thr Ile, 265 270 260 Glu Leu Gly Ser Leu Ser Tyr Ser Ser Gly Ala Gln Leu Asn Gly His 280 285 Asp Ser Ala Tyr Leu Gly Ile Tyr Pro Thr Pro Ser Ala Asn Ala Leu 295 300 Arg Val Ala Asp Ala Val Arg Ala Glu Leu Glu Arg Leu Ser Thr Arg 310 315 Phe Pro Asp Asp Leu Val Tyr Glu Val Lys Phe Asp Thr Thr Ser Phe 330 Val Ala Ala Thr Ile Lys Glu Ile Gly Val Ser Leu Ala Leu Thr Met 345 Leu Ala Val Val Val Val Ser Leu Phe Leu Gln Ser Trp Arg Ala 360 Thr Leu Ile Val Ala Leu Ala Ile Pro Val Ser Leu Val Gly Thr Phe 375

Ala Val Leu Tyr Thr Leu Gly Tyr Ser Ala Asn Thr Leu Ser Leu Phe

385															
	- 1	- 1	-		390	mi.	<b>5</b> # - 1.			395	<b>.</b>	71-	<b>T</b> 1 -	17- 3	400
	Ile			405					410					415	
	Glu		420					425					430		
Ala	Thr	Ala 435	Leu	Ala	Leu	Arg	Gln 440	Ile	Ala	Gly	Pro	Val 445	Ile	Ala	Thr
Thr	Leu 450	Val	Leu	Leu	Ala	Val 455	Phe	Val	Pro	Val	Ala 460	Leu	Leu	Pro	Gly
Ile 465	Val	Gly	Glu	Leu	Tyr 470	Arg	Gln	Phe	Ala	Val 475	Thr	Leu	Ser	Thr	Ala 480
Val	Thr	Leu	Ser	Ser 485	Leu	Val	Ala	Leu	Thr 490	Leu	Thr	Pro	Ala	Leu 495	Cys
Ala	Leu	Leu	Leu 500	Arg	Pro	Arg	Pro	Ala 505	Gln	Pro	Ala	Ala	Val 510	Phe	Arg
Gly	Phe	Asn 515	Arg	Gly	Leu	Asp	Ala 520	Thr	Arg	Thr	Leu	Tyr 525	Thr	Arg	Ile
Val	Ser 530	Val	Phe	Asn	Leu	Arg 535	Pro	Trp	Leu	Ala	Leu 540	Leu	Ala	Thr	Ala
Gly 545	Ala	Ala	Ala	Val	.Val 550	Val	Phe	Ser	Phe	Met 555	Ser	Met	Pro	Lys	Gly 560
Phe	Leu	Pro	Gln	Glu 565	Asp	Gln	Gly	Tyr	Phe 570	Phe	Ala	Ser	Val	Gln 575	Leu
Pro	Glu	Ala	Ala 580	Ser	Leu	Glu	Arg	Thr 585	Glu	Ala	Val	Met	Thr 590	Thr	Ala
_	Glu	595			_		600					605			
	Gly 610					615					620				
625	Ser				630					635					640
	Met	_		645		_			650					655	
	Met		660					665		•			670		
_	Phe	675					680					685			
	Glu 690	_			_	695					700				
705	Leu		_		710			_		715					720
	Leu			725					730					735	
	Arg		740					745					750		
_	Asp	755					760		_			765			
Glu	Met 770	Gln	Trp	Arg	Glu	Arg 775	Ala	Glu	Gln	Ile	Ser 780	Glu	Leu	Phe	Val
785	Ser				790					795					800
	Pro			805					810					815	
Ser	Val	Ser	Val 820	Ser	Gly	Ser	Ala	Ala 825	Glu	Gly	Val	Ser	Ser 830	Ser	Thr
	Met	835			_		840					845			
	Asp 850					855					860				
Asn 865	Gln	Ala	Ile	Trp	Ile 870	Val	Leu	Ala	Ala	Val 875	Val	Met	Ala	Trp	Leu 880

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Phe Leu Val Ala Gln Tyr Glu Ser Trp Thr Leu Pro Ala Ser Val Met
                                    890
                885
Leu Ser Val Leu Phe Ala Ile Gly Gly Ala Leu Val Trp Leu Trp Leu
                                905
Ala Gly Tyr Ala Asn Asp Val Tyr Val Gln Ile Gly Leu Val Leu Leu
                            920
Ile Ala Leu Ala Ala Lys Asn Ala Ile Leu Ile Val Glu Phe Ala Arg
                        935
                                            940
Ala Arg Arg Met Asp Gly Met Ala Ile Val Asp Ala Arg Glu Gly
                    950
                                        955
Ala Ser Arg Arg Phe Arg Ala Val Met Met Thr Ala Val Ser Phe Ile
                965
                                    970
Ile Gly Val Leu Pro Met Met Leu Ala Thr Gly Ala Gly Ala Gln Ser
           980
                                985
        .
Arg Arg Ile Ile Gly Thr Thr Val Phe Ser Gly Met Leu Val Ala Thr
                            1000
                                                1005
Val Val Gly Ile Val Phe Ile Pro Ala Leu Phe Val Leu Phe Gln Arg
                        1015
                                            1020
Leu Arg Glu Trp Gly His Gly Leu Thr Asp Ser Ser Pro Thr Ala His
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                                        1035
Ser Ala Ser Ala Pro Glu Lys Ser Ala Ser Arg His Arg Arg
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                1045
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<212> PRT
<213> Enterobacter cloacae
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Ile Leu Ile Ala Leu Leu Ser Val Ser Gly Leu Ser Val Asp Arg Thr
Cys Met Val Leu Met Cys Gly Leu Gly Arg Met Ser Gln Cys Arg Ser
Leu Met Leu Ser Ile Leu Ser Asp Arg Gln Ala Asp Arg Leu Met Glu
Trp Asp Ile Arg Asn Gly Val Ile Gln Arg Tyr Gly Arg Arg His Gly
                    70
                                        75
Ile Ala Val Pro Val Ser Asp Val Val Pro Leu Leu Ala Ala Gly
Ser Glu Gly Pro Gly
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<210> 9842
<211> 241
<212> PRT
<213> Enterobacter cloacae
<400> 9842
His Ser Ser Asp Ala Thr Leu Phe Ser Val Leu Ile Thr Ser Ser Asn
                                    10
Lys Phe Met Thr Thr Ala Asp Phe Lys Arg Pro Lys Leu Glu Leu Pro
                               25
Asn Gly Ala Asp Lys Leu Leu His Ser Cys Cys Ala Pro Cys Ser
                            40
Gly Glu Val Met Glu Ala Ile Gln Ala Ser Gly Ile Asp Tyr Thr Ile
                       55
                                            60
Phe Phe Tyr Asn Pro Asn Ile His Pro Gln Lys Glu Tyr Leu Ile Arg
                   70
                                        75
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Lys Asp Glu Asn Ile Arg Phe Ala Glu Gln His Gly Val Pro Phe Ile

90 Asp Ala Asp Tyr Asp Thr Asp Asn Trp Phe Glu Arg Ala Lys Gly Met 105 Glu Trp Glu Pro Glu Arg Gly Ile Arg Cys Thr Met Cys Phe Asp Met 120 Arg Phe Glu Arg Thr Ala Leu Tyr Ala Ala Glu Asn Gly Phe Asn Val 135 Ile Ser Ser Ser Leu Gly Ile Ser Arg Trp Lys Asn Met Gln Gln Ile 150 155 Asn Asp Cys Gly Gln Arg Ala Ala Ala His Tyr Pro Gly Met Val Tyr 165 170 Trp Asp Tyr Asn Trp Arg Lys Gln Gly Gly Ser Ser Arg Met Ile Glu 180 185 Ile Ser Lys Arg Glu Gln Phe Tyr Gln Glu Tyr Cys Gly Cys Val 200 195 Tyr Ser Leu Arg Asp Ser Asn Leu His Arg Lys Ser Gln Gly Arg Pro 215 Leu Ile Gln Ile Gly Lys Leu Tyr Tyr Gly Lys Glu Asp Asp Gln Ala 230 235

<210> 9843 <211> 268 <212> PRT <213> Enterobacter cloacae <

Ile Lys Leu Lys Arg Thr Gly Met Met His Ser Ser Ala Cys Asp Cys Glu Ala Ser Leu Cys Glu Thr Leu Arg Gly Phe Ser Ala Gln His Pro Asp Ser Val Ile Tyr Gln Thr Ser Leu Met Ser Ala Leu Leu Ser Gly Val Tyr Glu Gly Glu Thr Thr Ile Ala Asp Leu Leu Ala His Gly 55 Asp Phe Gly Leu Gly Thr Phe Asn Glu Leu Asp Gly Glu Met Ile Ala 75 Phe Ser Ser Gln Val Tyr Gln Leu Arg Ala Asp Gly Ser Ala Arg Ala 90 Ala Lys Pro Glu Gln Lys Thr Pro Phe Ala Val Met Thr Trp Phe Gln 105 110 Pro Gln Tyr Arg Lys Thr Phe Asp Gly Pro Val Ser Arg Gln Gln Ile 115 120 125 His Asp Val Ile Asp Gln Gln Val Pro Ser Asp Asn Leu Phe Cys Ala 135 140 Leu Arg Ile Asp Gly Asn Phe Arg His Ala His Thr Arg Thr Val Pro 150 155 Arg Gln Thr Pro Pro Tyr Arg Ala Met Thr Asp Val Leu Asp Asp Gln 165 170 Pro Val Phe Arg Phe Asn Gln Arg Glu Gly Val Leu Val Gly Phe Arg 180 185 Thr Pro Gln His Met Gln Gly Ile Asn Val Ala Gly Tyr His Glu His 200 Phe Ile Thr Asp Asp Arg Gln Gly Gly His Leu Leu Asp Tyr Gln 215 Leu Glu Asn Gly Val Leu Thr Phe Gly Glu Ile His Lys Leu Met Ile 235 Asp Leu Pro Ala Asp Ser Ala Phe Leu Gln Ala Asn Leu His Pro Ser Asn Leu Asp Ala Ala Ile Arg Ala Val Glu Asn

265 <210> 9844 <211> 278 <212> PRT <213> Enterobacter cloacae <400> 9844 Pro Ala Ala Asp Gly Pro Ala Pro Ser Gln Pro Asp Phe Val Asn Gln Tyr Lys Asp Arg Glu Met Gln Lys Val Ala Leu Val Thr Gly Ser Gly 25 Gin Gly Ile Gly Lys Ala Ile Ala Leu Arg Leu Val Lys Asp Gly Phe 40 Ala Val Ala Ile Ala Asp Tyr Asn Glu Glu Thr Ala Lys Ala Val Ala 55 Asp Glu Ile Thr Arg Asn Gly Gly Lys Ala Val Ala Val Lys Val Asp 75 70 Val Ser Asp Arg Glu Gln Val Phe Ala Ala Val Glu Lys Ala Arg Thr 85 90 Ala Leu Gly Gly Phe Asn Val Ile Val Asn Asn Ala Gly Val Ala Pro 100 105 Ser Thr Pro Ile Glu Ser Ile Thr Pro Glu Ile Val Asp Lys Val Tyr 120 125 Asn Ile Asn Val Lys Gly Val Ile Trp Gly Ile Gln Ala Ala Ile Asp 135 140 Ala Phe Arg Lys Glu Gly His Gly Gly Lys Ile Ile Asn Ala Cys Ser 150 155 Gln Ala Gly His Thr Gly Asn Pro Glu Leu Ala Val Tyr Ser Ser Ser 170 Lys Phe Ala Val Arg Gly Leu Thr Gln Thr Ala Ala Arg Asp Leu Ala 185 Pro Leu Gly Ile Thr Val Asn Ala Tyr Cys Pro Gly Ile Val Lys Thr 200 Pro Met Trp Ala Glu Ile Asp Arg Gln Val Ser Glu Ala Ala Gly Lys 215 220 Pro Leu Gly Tyr Gly Thr Glu Thr Phe Ala Lys Arg Ile Thr Leu Gly 230 235 Arg Leu Ser Glu Pro Glu Asp Val Ala Ala Cys Val Ser Tyr Leu Ala 245 250 Gly Pro Asp Ser Asp Tyr Met Thr Gly Gln Ser Leu Leu Ile Asp Gly 260 265 Gly Met Val Phe Asn <210> 9845 <211> 86 <212> PRT <213> Enterobacter cloacae <400> 9845 Lys Pro Pro Pro Thr Arg Arg Gly Asn Ala Phe Trp Ala Pro Cys Arg 10

Thr Ala Pro Thr Ala Thr Arg Arg Gly Ala Pro Ile Ser Pro Ala Arg 25 Arg Thr Gly Arg Thr Phe Leu Ser Lys Lys Pro Ile Ser Thr Arg Trp 40 Lys Asn Ala Thr Ala Ser Ala Thr Ala Met Asn Arg Thr Ala Gly Thr 55 Arg Trp Met Ser Gly Ser Ala Leu Ile Lys Pro Leu Thr Asn Pro Thr 70

Val Ser Ala Gly Trp 85

Thr Leu Phe Pro Phe Pro Asp Gly Arg Leu Met Ile Ser Pro Gln Gly Ala Ala Met Ile Asn Val Gly Ile Ile Gly Ser Gly Phe Ile Gly Pro Ala His Ile Glu Ala Leu Arg Arg Leu Gly Phe Val Gln Val Val Ala Leu Cys Asp Gly Ser Leu Val Lys Ala Gln Glu Lys Ala Arg Gln Leu 70 Asn Val Pro His Ala Tyr Ala Ser Val Glu Glu Leu Leu Ala His Pro 90 Asn Leu His Ala Val His Asn Cys Thr Pro Asn His Leu His Ala Glu 105 Ile Asn Arg Gln Ile Leu Arg Ala Gly Lys His Val Phe Ser Glu Lys 120 Pro Leu Cys Met Thr Pro Asp Glu Ala Arg Glu Leu Val Ala Leu Ala 135 Glu Gln Ala Gly Val Val His Gly Val Ser Phe Val Tyr Arg Gln Phe 150 Ala Met Val Arg Gln Ala Ala Ser Met Met Arg Ala Gly Thr Val Gly 170 165 Arg Leu Phe Ala Ser His Gly Ser Tyr Leu Gln Asp Trp Met Leu Leu 185 Glu Thr Asp Tyr Asn Trp Arg Val Glu Ala Ala Leu Gly Gly Ala Ser 195 200

Arg Ala Val Ala Asp Ile Gly Ser His Trp Cys Asp Thr Val Gln Tyr 215 220 Val Thr Gly Arg Arg Ile Thr Glu Val Met Ala Asp Leu Ser Ile Val 230 235 Trp Pro Arg Arg Lys Ala Ser Ala Gly Gly Tyr Gln Thr Phe Ser His 245 250 Asp Glu Gln Ala Glu Tyr Glu Val Lys Pro Val Thr Thr Glu Asp Phe 265 270 Gly Ser Val Leu Phe Arg Phe Asp Asp Gly Ser Lys Gly Ser Phe Ser 280 285 Val Ser Gln Val Ser Ala Gly Arg Lys Asn Arg Leu Thr Phe Glu Ile 295 300 Asn Gly Ser Glu Gln Ser Val Ala Trp Asp Gln Glu Ile Pro Gln Gln 315 310 Leu Trp Ile Gly His Arg Ala Arg Ala Asn Gln Thr Leu Thr Asp Asp 325 330 335 Pro Gly Leu Met Asn Pro Asp Val Ala Asp Ser Ala His Phe Pro Gly 345 Gly His Ile Glu Gly Trp Pro Asp Ala Phe Lys Asn Met Met Ala Gln

355 360 365

Phe Tyr Arg Ala Val Gln Ala Gly Ala Met Pro Asp Thr Pro Gln Phe 370 375 380

Ala Thr Phe His Asp Gly Ala Asn Val Met Tyr Ile Ile Asp Ala Ile

385 390 395 40
Val Lys Ser His Gln Gln Gln Arg Trp Val Arg Val Glu Gln

405 410 415

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<211> 340
<212> PRT
<213> Enterobacter cloacae
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Ile Tyr Gly Ser Leu His Lys Thr Leu Thr Ala Gly Cys Val Val Ala
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Met Ser Ile Gln Lys Ile Ala Gln Leu Ala Gly Val Ser Val Ala Thr
            20
                                25
Val Ser Arg Val Leu Asn Asn Ser Asp Thr Val Lys Ala Lys Asn Arg
                            40
Glu Arg Val Leu Arg Ala Ile Gln Glu Ser Asn Tyr Gln Pro Asn Leu
                        55
                                             60
Leu Ala Arg Gln Leu Arg Thr Ala Arg Ser Tyr Met Ile Leu Val Met
                    70
                                        75
Val Ser Asn Ile Ala Asn Pro Phe Cys Ala Glu Val Val Lys Gly Ile
Glu Ala Glu Ala Glu Lys Asn Gly Tyr Arg Ile Leu Leu Cys Asn Ser
                                105
Gly Ser Asp Ile Glu Arg Ser Arg Ser Gly Leu Ser Leu Leu Ser Gly
                            120
Lys Ile Val Asp Gly Ile Ile Thr Met Asp Ala Phe Ser Lys Leu Pro
                        135
                                            140
Glu Leu Ala Ala Leu Ile Gly Asn Ala Pro Trp Val Gln Cys Ala Glu
                    150
                                        155
Tyr Ala Asp Ala Gly Ala Val Ser Cys Val Gly Ile Asn Asp Val Asp
                165
                                    170
Ala Ser Gln His Ala Val Ser Gln Leu Ala Asp Gly Gly Arg Lys Arg
            180
                                185
Ile Ala Met Ile Asn His Asp Leu Ser Tyr Lys Tyr Ala Arg Leu Arg
        195
                            200
Glu Arg Gly Tyr Lys Ser Val Ile His Leu Arg Asp Leu Asp Tyr Gln
                        215
                                            220
Ala Val Glu Tyr Ala Ser Asp Leu Ser Ser Gly Ala Gly Met Ala Ala
                    230
                                        235
Met Gln Asn Leu Leu Lys Asp Asn Pro Pro Asp Ala Val Phe Ala Val
                                    250
                245
Ser Asp Thr Leu Ala Ala Gly Ala Leu Arg Ala Ile Gln Gln Ala Gly
                                265
            260
Leu Arg Val Pro Glu Asp Ile Ala Val Val Gly Phe Asp Gly Thr Glu
                            280
                                                 285
Leu Ala Asp Met Ile Ser Leu Thr Thr Ile Glu Gln Pro Ser Arg Asp
                        295
                                            300
Ile Gly Arg Lys Ala Val Asp Leu Leu Leu Asn Lys Ile Asp Asn Pro
                    310
                                        315
Asp Ala Pro Thr Glu Arg Val Met Met Asp Trp Arg Phe Ile Ser Arg
                325
                                    330
Ala Ser Thr
            340
<210> 9848
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 9848
Asn Asp Asn Arg Arg Cys Trp Met Ser Lys Lys Ile Ile Asp Trp Asp
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Glu Leu Arg Ala Glu Leu Leu Ser Asp Ser Glu Val Gln Ala Ser Phe

<210> 9849

<211> 544

<212> PRT

<213> Enterobacter cloacae

<400> 9849

Tyr Cys Lys Leu Leu Pro Phe Ala Leu Ala Leu Leu Thr Asn Phe Val Gly Glu Gln Ala Val Met Lys Arg Val Trp Ser Gly Leu Leu Gly 20 25 Ile Gly Ala Leu Pro Ala Val Ala Ala Thr Cys Glu Gln Thr Ser Arg 40 Gln Gly Asp Ile Gln Gly Lys Phe Asp Ala Ser Gly Glu Val Cys Phe 55 Ser Leu Pro Glu Leu Gly Glu Asn Tyr Val Ser Ala Thr Leu Asn Gly 70 75 Val Thr Asp Ala Arg Leu Leu Asp Gly Gln Asn Arg Arg Ile Arg Thr 90 Leu Ile Glu Asn Gly Pro Ala Asp Gly Glu His Thr Leu Leu Phe Ala 105 Leu Pro Val Lys Gln Asn Thr Ser Leu Val Leu His Gly Glu Ala Gly 120 Lys Pro Trp Arg Phe Gln Trp Arg Met Lys Glu Thr Ser Pro Leu Pro 135 Arg Val Gln Met Leu Ala Pro Glu Ser Pro Thr Leu Lys Ala Leu Ala Ser Val Ile Ser Ala Gly Gly Ser Thr Glu Ala Phe Trp Gln Ala Gln 165 170 Arg Arg Gln Gly Thr Pro Met Val Glu Pro Val Asp Ala Ser His Lys 180 185 Arg Val Thr Phe Leu Trp Arg Gly Ala Arg Asp Asn Val Phe Ile Leu 200 195 Gly Ser Pro Ala Gly Asp His Asp Pro Leu Phe Arg Leu Gly Asn Ser 215 220 Asp Val Trp Phe Arg Ser Tyr Val Val Pro Ala Asp Thr Val Met Gln 230 235 Tyr Lys Leu Ala Pro Asp Val Pro Ile Val Glu Gly Ser Thr Arg Asp 245 250 Gln Arg Arg Ala Ile Leu Val Ser Ala Gln Ala Asp Pro Leu Asn Pro 260 265 Asn Thr Phe Gly Glu Gln Lys Thr Asp Arg Trp Asn Arg Phe Ser Leu 280 285 Leu Asp Leu Ser Pro Ala Arg Tyr Cys Ser Val Gln Ala Thr Ala Lys 295 300 Pro Leu Val His Gly Thr Leu Ser Arg Gln Ser Phe Ser Ser His Ile 310 315 Leu Gly Asn Ala Arg Asp Val Met Ile Tyr Gln Pro Arg Gly Ala Gln 325 330 Pro Ala Arg Trp Thr Leu Ile Leu Phe Asp Gly Gln Val Tyr Gln Asp

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340
                                345
                                                    350
Glu Tyr His Phe Ala Asn Val Leu Asp Gly Leu Ile Ala Arg His His
                            360
                                                365
Leu Pro Pro Ile Asn Val Val Phe Ile Asp Ser Leu Asp His Ala Arg
                        375
                                            380
Arg Gly Asn Glu Leu Pro Pro Asn Pro Asp Phe Ala Asp Phe Met Ala
                                        395
                   390
His Glu Leu Leu Pro Trp Leu Arg Gly Lys Gly Ile Gly Met Gln Arg
                405
                                    410
Gln Lys Thr Val Leu Ala Gly Ser Ser Tyr Gly Gly Ile Ala Ser Ser
                                425
            420
Trp Val Ala Leu Arg Tyr Pro Arg Leu Phe Gly Asn Val Leu Ser Leu
                            440
        435
Ser Gly Ser Tyr Trp Ala Pro Glu Gly Asp Ala Pro Gly Trp Leu
    450
                        455
                                            460
Thr Arg Gln Tyr Gln Gln Ser Pro Pro Tyr Pro Val Arg Phe Trp Leu
                    470
                                        475
Gln Ala Gly Lys Phe Glu Thr Ala Gly Pro Gly Gly Gly Ile Tyr Arg
                                    490
Thr Thr Gln Asp Phe Glu Gln Val Leu Arg Lys Lys Gly Tyr Arg Val
            500
                                505
Ser Phe His Pro Ser Ser Gly His Asp Tyr Ala Ala Trp Cys Glu
                            520
Ala Leu Ile His Gly Met Arg Asp Leu Thr Gly Leu Arg Arg Gln
                        535
<210> 9850
<211> 298
<212> PRT
<213> Enterobacter cloacae
<400> 9850
Pro Met Ser Asp Tyr Pro Thr Ile Ala Leu Thr Gly Pro Gly Ala Ile
Gly Thr Thr Ile Ala Ala Val Leu His Glu Ala Gly Arg Thr Pro Leu
Leu Cys Gly Arg Thr Ala His Pro Glu Leu Arg Leu Arg His Asp Glu
                           40
Gly Glu Ile Val Val Pro Gly Pro Val Leu Thr Asp Pro Ser Val Ile
                        55
Thr Arg Pro Val Asp Leu Val Phe Leu Ala Val Lys Thr Thr Gln Asn
                    70
Ala Asp Ser Ala Gly Trp Leu Arg Ala Leu Cys Asp Glu Asn Thr Val
               85
                                    90
Val Cys Ala Leu Gln Asn Gly Val Glu Gln Lys Ala Gln Leu Ala Pro
                                105
                                                    110
           100
Leu Val Asn Gly Ala Thr Val Leu Pro Ser Val Val Trp Phe Pro Ala
                            120
                                                125
Gln Arg Glu Pro Asp Ala Ser Val Trp Leu Arg Ala Lys Pro Arg Leu
                       135
                                            140
Thr Leu Pro Asp Val Pro Gln Ala Gln Arg Val Val Glu Ala Leu Arg
                   150
                                       155
Asp Thr Arg Cys Ala Val Glu Leu Ser Glu Asp Phe Pro Thr Val Ala
               165
                                    170
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Trp Arg Lys Leu Leu Gln Asn Ala Val Ala Gly Leu Met Val Leu Ala
180
185
190
Asn Arg Arg Ala Gly Met Phe Arg Arg Glu Asp Ile Ser Glu Leu Ala
195
200
Leu Ala Tyr Leu Arg Glu Gly Leu Thr Val Ser Arg Ala Glu Gly Ala

Lys Leu Asp Asp Ala Val Ala Glu Glu Ile Leu Ala Asn Phe Gln Arg

220

215

. 5389

230 235 Ala Pro Val Asp Leu Gly Thr Ser Ile Leu Ala Asp Arg Gln Ala Asp 250 Arg Pro Met Glu Trp Asp Ile Arg Asn Gly Val Ile Gln Arg Tyr Gly 265 Arg Arg His Gly Ile Ala Val Pro Val Ser Asp Val Val Pro Leu 280 Leu Ala Ala Gly Ser Glu Gly Pro Gly <210> 9851 <211> 593 <212> PRT <213> Enterobacter cloacae <400> 9851 Leu Thr Cys Pro Pro Thr Ala Arg Phe Tyr Arg Pro Ile Cys Thr Pro 10 Ala Thr Leu Met Arg Leu Ser Ala Pro Ser Lys Thr Asn Arg Arg Thr 20 Thr Val Asn Ser Glu Lys Gln Ser Arg Gln Trp Ala His Gly Ala Asp 40 Met Val Val Gly Gln Leu Glu Ala Gln Gly Val Lys Gln Val Phe Gly Ile Pro Gly Ala Lys Ile Asp Lys Val Phe Asp Ser Leu Leu Asp Ser 75 Ser Ile Glu Ile Ile Pro Val Arg His Glu Ala Asn Ala Ala Phe Met 90 Ala Ala Ala Val Gly Arg Leu Thr Gly Lys Ala Gly Val Ala Leu Val 105 Thr Ser Gly Pro Gly Cys Ser Asn Leu Ile Thr Gly Ile Ala Thr Ala 120 Asn Ser Glu Gly Asp Pro Val Val Ala Leu Gly Gly Ala Val Lys Arg 135 140 Ala Asp Lys Ala Lys Leu Val His Gln Ser Met Asp Thr Val Ala Met 155 Phe Ser Pro Val Thr Lys Tyr Ala Val Glu Val Asn Ser Pro Asp Ala 170 165 Ile Ala Glu Val Val Ser Asn Ala Phe Arg Ala Ala Glu Gln Gly Arg 180 185 Pro Gly Gly Ala Phe Val Ser Leu Pro Gln Asp Ile Val Asp Gln Pro 195 200 Thr Thr Gly Ala Ile Leu Pro Ala Ser Thr Ala Ala Leu Met Gly Pro 215 220 Ala Pro Glu Ser Ala Ile Asn Glu Val Ala Lys Leu Ile Ala Lys Ala 230 235 Lys Asn Pro Val Ile Leu Leu Gly Leu Met Ala Ser Gln Pro Ala Asn 250 245 Ser Ala Ala Leu His Lys Leu Leu Glu Arg Ser Arg Ile Pro Val Thr 260 265 270 Ser Thr Tyr Gln Ala Ala Gly Ala Val Asn Gln Glu His Phe Thr Arg 275 280 285 Phe Ala Gly Arg Val Gly Leu Phe Asn Asn Gln Ala Gly Asp Arg Leu 295 300 Leu His Leu Ala Asp Leu Ile Ile Cys Ile Gly Tyr Ser Pro Val Glu 310 315 Tyr Glu Pro Ser Met Trp Asn Ser Gly Asp Ala Thr Leu Val His Ile 325 330 Asp Val Leu Pro Ala Tyr Glu Glu Arg Lys Tyr Val Pro Asp Leu Glu 345

Leu Val Gly Asp Ile Ala Ala Thr Leu Asn Leu Leu Ala Ser Arg Ile

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360
Glu His Lys Leu Glu Leu Ser Gln Arg Ala Ser Glu Ile Leu Val Asp
                        375
                                            380
Arg Gln His Gln Arg Asp Leu Leu Asp Arg Gly Ala Ser Leu Asn
                                        395
                    390
Gln Phe Ala Leu His Pro Leu Arg Ile Val Arg Ala Met Gln Asp Ile
                                    410
Val Asn Asn Asp Val Thr Leu Thr Val Asp Met Gly Ser Phe His Ile
            420
                                425
Trp Ile Ala Arg Tyr Leu Tyr Ser Phe Arg Ala Arg Gln Val Met Ile
                            440
Ser Asn Gly Gln Gln Thr Met Gly Val Ala Leu Pro Trp Ala Ile Gly
                        455
                                            460
Ala Trp Leu Val Asn Pro Gly Arg Lys Val Val Ser Val Ser Gly Asp
                    470
                                        475
Gly Gly Phe Leu Gln Ser Ser Met Glu Leu Glu Thr Ala Val Arg Leu
                                    490
Asn Ala Asn Ile Leu His Ile Ile Trp Val Asp Asn Ala Tyr Asn Met
                                505
Val Ala Ile Gln Glu Glu Lys Lys Tyr Gln Arg Leu Ser Gly Val Glu
                         , 520
Phe Gly Pro Val Asp Phe Lys Ala Tyr Ala Asp Ala Phe Gly Ala Lys
                        535
Gly Phe Ala Val Glu Ser Ala Asp Ala Leu Glu Pro Thr Leu Arg Ala
                    550
                                        555
Ala Met Asp Val Asp Gly Pro Ala Val Val Ala Ile Pro Val Asp Tyr
                                    570
Ser Asp Asn Pro Leu Leu Met Gly Gln Leu His Leu Ser Gln Ile Leu
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<210> 9852
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<400> 9852

 Pro
 Arg
 Pro
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 Gly
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 Ser
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 Arg
 Trp
 Gly
 Ser
 Pro
 Leu
 Thr

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 Ile
 Ala
 Arg
 Ala
 Ser
 Ser
 Lys
 Arg
 Arg
 Arg
 Cys
 Gly
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 Ser
 Thr

 Val
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<210> 9853

<211> 255

<212> PRT

<213> Enterobacter cloacae

<400> 9853

Val Thr Ser Leu Phe Val Arg Phe Leu Thr Cys Tyr Asn Lys Leu Leu 1 5 10 15 15 Thr Phe Gln Gly Val Thr Ala Val Pro Glu Ile Asn Gln His Gly Gln 20 25 30 Thr Val Asn Asp Ile Val Pro Asp Trp Lys Cys Ala Arg Ala Leu Thr

<sup>&</sup>lt;211> 80

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

Arg Thr Leu Leu Thr Gly Gln Tyr Cys Arg Leu Glu Pro Leu Asp Ala 55 60 Asp Arg His Ser Ala Asp Leu Phe Glu Ala Tyr Ala Leu Gly Asp Asp 70 75 Ser Asp Trp Thr Trp Leu Ala Ser Thr Gln Pro Val Ser Val Glu Ala 85 90 Thr Ala His Trp Val Leu Gly Lys Val Leu Asp Asp Asp Leu Val Pro 105 Phe Ala Ile Ile Asp Leu Arg Thr Glu Lys Ala Val Gly Leu Val Ser 120 Tyr Met Ala Ile Glu Arg Phe Gln Gly Ser Val Glu Ile Gly His Val 135 140 Thr Trp Ser Arg Arg Met Lys Gly Thr Arg Val Gly Thr Glu Ala Val 155 150 Trp Leu Leu Lys Asn Ala Phe Glu His Gln Tyr Arg Arg Leu Glu 165 170 Trp Lys Cys Asp Ser Met Asn Ile Ala Ser Arg Asn Ala Ala Glu Arg . 185 180 Leu Gly Phe Val Trp Glu Gly Arg Leu Arg Gln Lys Leu Val Arg Lys 200 Gly Arg Asn Arg Asp Ser Asp Met Leu Ser Ile Ile Asp Gly Glu Trp 220 215 Pro Gln Arg Asp Ala Glu Leu Arg Ala Trp Leu Ala Ala Glu Asn Phe 230 235 Asp Gly Glu Gly Arg Gln Val Arg Arg Leu Glu Glu Phe Arg 245 250

<210> 9854

<211> 731

<212> PRT

<213> Enterobacter cloacae

<400> 9854

Glu Leu Ile Met Asn Asn Thr Thr Met His Lys Thr Leu Leu Ala Ile 10 Ala Ile Gly Ala Val Thr His Ser Ala Phe Ala Ala Asp Glu Lys Lys Glu Asp Thr Ile Val Val Gln Ser Thr Ala Gly Ser Asp Phe Lys Pro Gly Gly Asp Gln Leu Val Pro Ala Phe Leu Asp Gly Gln Val Ala Asn Gly Gly Arg Met Gly Met Leu Gly Gln Gln Asn Ala Met Asp Val Pro Phe Asn Ile Ile Ser Tyr Thr Ser Lys Leu Val Glu Asp Gln Gln Ala Lys Thr Ile Ala Asp Val Val Ala Asn Asp Ala Gly Val Gln Phe Val 105 Gln Gly Tyr Gly Asn Ser Ala Glu Thr Phe Arg Ile Arg Gly Leu Lys 120 125 Phe Asp Gly Asp Asp Met Thr Phe Gly Gly Leu Ser Gly Val Leu Pro 135 140 Arg Gln Val Val Asp Ala Gln Met Val Asp Arg Ile Glu Ile Phe Lys 150 155 Gly Ala Asn Ser Leu Met Asn Gly Ala Ala Ser Ser Gly Val Gly Gly 170 Met Ile Asn Leu Glu Pro Lys His Ala Gly Asp Thr Pro Gln Ala Lys 185 Val Gly Val Asp Tyr Thr Ser Asp Ser Gln Ile Gly Thr Thr Leu Asp 200 Ala Gly Arg Arg Phe Gly Asp Asn Asp Gln Phe Gly Ala Arg Val Asn

Leu Val His Arg Glu Gly Glu Thr Gly Val Pro Asn Asp Arg Arg Arg 230 235 Thr Thr Leu Leu Ser Thr Gly Leu Asp Tyr Lys Gly Asp Arg Phe Arg 250 Thr Ser Leu Asp Leu Gly Tyr Gln Lys Lys Thr Phe His Gly Ser Pro 265 Thr Ser Val Asn Ile Ser Ala Val Asp Phe Val Pro Glu Pro Pro Lys 280 Asn Asp Arg Asn Phe Ser Gln Lys Trp Ala Tyr Ser Asp Ile Glu Asn 295 300 Glu Phe Gly Met Trp Arg Ser Glu Tyr Asp Ile Thr Asp Ser Trp Thr 315 310 Ala Tyr Thr Gly Leu Gly Ala Gln His Ala His Glu Glu Gly Ile Tyr 325 330 Ser Ala Pro Lys Leu Leu Asp Lys Ser Gly Asn Ala Val Val Ser Arg 340 345 Leu Asp Thr Asn Arg Ile Ser Asp Ser Val Ser Gly Met Ala Gly Ile 360 Arg Gly Asn Phe Thr Thr Gly Phe Val Ser His Lys Val Asn Val Gly 375 380 Tyr Ser Ala Met Thr Lys Asn Glu Lys Ile Ala Trp Lys Met Ser Ala 390 395 Thr Lys Asp Asn Pro Thr Thr Asn Ile Tyr His Asn Thr Gly Val Asp 405 410 Met Pro Asp Ser Ser Asn Leu Asn Gly Ser Gly Gly Lys Tyr Ser Asp 420 425 430 Pro Leu Thr Ser Gly Arg Thr Arg Thr Gln Gly Trp Leu Leu Ser Asp 440 Thr Leu Gly Val Leu Asp Asp Lys Leu Leu Phe Thr Ala Gly Ala Arg 455 His Gln Lys Val Val Ile Arg Gly Tyr Asn Lys Ile Thr Gly Ala Glu 470 475 Asn Asp Ala Asp Gly Phe Asp Gly Ser Arg Trp Met Pro Thr Tyr Gly 485 490 Val Val Tyr Lys Pro Trp Glu Glu Ile Ser Leu Tyr Ala Asn His Thr 505 500 Glu Ala Leu Gln Pro Gly Glu Thr Ala Pro Arg Ser Ala Asn Asn Tyr 520 Gly Gln Ser Thr Gly Ile Val His Ser Lys Gln Asn Glu Val Gly Val 535 540 Lys Ala Asp Phe Gly Arg Val Gly Gly Ser Leu Ala Leu Phe Glu Ile 550 555 Lys Met Pro Ser Ala Ile Leu Asp Asp Ser Gly His Tyr Gly Leu Asp 570 565 Ala Glu Gln Arg Asn Arg Gly Val Glu Leu Asn Val Phe Gly Glu Pro 585 590 580 Met Leu Gly Met Arg Leu Asn Ala Ser Ala Thr Trp Leu Gln Ala Glu 600 605 Leu Thr Lys Thr Lys Asn Gly Val Asn Gln Gly Asn Asp Ala Ile Gly 615 620 Ile Pro Ser Phe Tyr Ala Val Leu Gly Ala Glu Tyr Asp Ile Lys Pro 630 635 Ile Glu Gly Leu Thr Ala Thr Ala Arg Val Asn His Ser Gly Thr Gln 645 650 Tyr Ala Asp Leu Ala Asn Ser Lys Lys Leu Asp Ser Tyr Thr Thr Leu 665 Asp Leu Gly Met Arg Tyr Arg Phe Ala Val Asn His Asn Glu Asn Gln 680 Met Thr Val Arg Ala Gly Ile Asp Asn Val Thr Asn Glu Asn Tyr Trp 695 Ser Ser Val Asp Asp Ser Gly Thr Tyr Ile Thr Gln Gly Glu Pro Arg

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720
                    710
                                        715
Thr Phe Lys Val Ser Val Gly Tyr Glu Phe
                725
<210> 9855
<211> 163
<212> PRT
<213> Enterobacter cloacae
<400> 9855
Gln Ala Val Thr Ala Met Asn Gly Thr Ile Thr Thr Trp Phe Lys Asp
                                    10
Lys Gly Phe Gly Phe Ile Lys Asp Glu Asn Gly Asp Asn Arg Tyr Phe
                                25
His Val Ile Lys Val Ala Asn Pro Asp Leu Ile Lys Lys Asp Ala Ala
Val Thr Phe Glu Pro Thr Thr Asn Ser Lys Gly Leu Ser Ala Tyr Ala
                        55
Val Lys Val Ile Pro Glu Ser Lys His Leu Tyr Ile Ala Gly Glu Arg
                                        75
                    70
Val Lys Leu Thr Ser Ile Lys Ser Phe Val Val Phe Ser Glu Glu Glu
                                    90
                85
Pro Val Asp Thr Lys Ile Asp Lys Glu Asn Ala Val Leu Ser Val Gly
            100
                                105
Leu Leu Met Asn Ser Ile Lys Pro Lys Thr Glu Lys Lys Pro Gly Glu
                            120
                                                125
Met Arg Thr Val Lys Lys Leu Ala Ile Thr Thr Phe Gln Asn Thr Thr
                        135
                                            140
Leu Ile Phe Thr Glu Asp Glu Ile Asp Ile Asp Ala Thr Val Lys Leu
145
                    150
                                        155
Leu Lys
<210> 9856
<211> 310
<212> PRT
<213> Enterobacter cloacae
<400> 9856
Cys Arg Leu Ser Lys Ile Lys Glu Ser Ala Arg Ala Met Lys Arg Pro
Asp Tyr Arg Thr Leu Gln Ala Leu Asp Ala Val Ile Arg Glu Arg Gly
Phe Glu Arg Ala Ala Gln Lys Leu Cys Ile Thr Gln Ser Ala Val Ser
Gln Arg Ile Lys Gln Leu Glu Asn Met Phe Gly Gln Pro Leu Leu Val
                        55
Arg Thr Val Pro Pro Arg Pro Thr Glu Gln Gly Gln Lys Leu Leu Ala
                    70
                                        75
Leu Leu Arg Gln Val Glu Leu Leu Glu Asp Glu Trp Leu Gly Asp Glu
                                    90
                85
Gln Thr Gly Ser Thr Pro Leu Leu Leu Ser Leu Ala Val Asn Ala Asp
            100
                                105
Ser Leu Ala Thr Trp Leu Leu Pro Ala Leu Ala Pro Val Leu Ala Asp
                                                125
                           120
Ser Pro Ile Arg Leu Asn Leu Gln Val Glu Asp Glu Thr Arg Thr Gln
                       135
                                            140
Glu Arg Leu Arg Arg Gly Glu Val Val Gly Ala Val Ser Ile Gln Pro
                   150
                                        155
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Gln Ala Leu Pro Ser Cys Leu Val Asp Gln Leu Gly Ala Leu Asp Tyr

170

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Leu Phe Val Gly Ser Lys Ala Phe Ala Glu Arg Tyr Phe Pro Asn Gly
            180
                               185
Val Thr Arg Ala Ala Leu Leu Lys Ala Pro Ala Val Ala Phe Asp His
                            200
                                                205
Leu Asp Asp Met His Gln Ala Phe Leu Gln Gln Asn Phe Asp Leu Pro
                        215
                                            220
Pro Gly Ser Val Pro Cys His Ile Val Asn Ser Ser Glu Ala Phe Val
                    230
                                        235
Gln Leu Ala Arg Gln Gly Thr Thr Cys Cys Met Ile Pro His Leu Gln
                                    250
                245
Ile Glu Lys Glu Leu Lys Ser Gly Glu Leu Ile Asp Leu Thr Pro Gly
                                265
Leu Tyr Gln Arg Arg Met Leu Tyr Trp His Arg Phe Ala Pro Glu Ser
        275
                            280
Arg Met Met Arg Asn Val Thr Asp Ala Leu Leu Ala Phe Gly His Lys
                        295
Val Leu Arg Gln Asp
                    310
305
<210> 9857
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 9857
Arg Ala Ser Ala Ser Pro Ile Thr Glu Pro Leu Pro Gly Arg Thr Leu
                                    10
Ser Ser Pro Ala Gly Ser Pro Ala Cys Leu Lys Ile Arg Ala Ser Ser
                                25
Ser Ala Ile Ser Gly Val Ala Ser Ala Gly Leu Arg Ile Thr Ala Phe
        35
                            40
Pro Ala Ala Ile Ala Gly Ala Thr Phe Cys Ile Ser Leu Ala Ile Gly
                        55
Glu Phe His Gly Val Met Ala Ala Thr Thr Pro Arg Gly Ser
<210> 9858
<211> 123
<212> PRT
<213> Enterobacter cloacae
<400> 9858
Cys Arg Ala Arg Arg Gly Ser Pro Asp Gly Cys Cys Thr Gly Ser Arg
Arg Ala Val Ala Arg Ser Pro Ala Gly Arg Pro Ala Pro Arg Pro Ala
                                25
Arg Arg Cys Thr Gln Ser Gln Asp Ala Ala Arg Ser Cys Pro Ala Lys
Arg Tyr Trp Cys Ala Cys Cys Ala Pro Glu Ser Pro Cys Thr Pro Ala
                        55
Ser Ala Pro Arg Asp Arg Ser Pro Ser Ala Tyr Pro Pro Ala Gly
                    70
                                        75
Ala Ala Arg Gln Lys Ser Asp Arg Asp Ala Ala Arg Gln Arg Pro Thr
                                    90
                85
Ala Ala Val Asn Arg Ala Pro Ala Pro Ala Pro Asp Thr Ser Leu Pro
            100
                                105
Asp Arg Leu Pro Ser Ser Pro Tyr Leu Ser
                            120
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<210> 9859 <211> 255

<212> PRT <213> Enterobacter cloacae

<400> 9859 Leu His Thr Gly Thr Thr Phe Val Thr Leu Arg Ala Arg Phe Asp Thr 10 Glu Cys Lys Met Ser Arg Asn Val Ser Leu Ala Val Ala Phe Leu Ala 25 Thr Ala Leu Ser Gly His Ala Leu Ala Asp Gly Ile His Ser Phe Ser Gln Ala Lys Thr Ala Gly Val Lys Ile Asn Ala Asp Val Pro Gly Asp Phe Tyr Cys Gly Cys Lys Ile Asn Trp Gln Gly Lys Lys Gly Val Val 70 75 Asp Leu Gly Ser Cys Gly Tyr Lys Val Arg Lys Asn Glu Asn Arg Ala 85 Ser Arg Ile Glu Trp Glu His Val Val Pro Ala Trp Gln Phe Gly His 105 Gln Arg Gln Cys Trp Gln Asp Gly Gly Arg Lys Asn Cys Ala Lys Asp 120 125 Pro Val Tyr Arg Gln Met Glu Ser Asp Met His Asn Leu Gln Pro Ala 135 140 Val Gly Glu Val Asn Gly Asp Arg Gly Asn Phe Met Tyr Ser Gln Trp 150 155 Asn Gly Gly Glu Gly Gln Tyr Gly Gln Cys Ala Met Lys Val Asp Phe 165 170 175 Lys Glu Lys Val Ala Glu Pro Pro Ala Arg Ala Arg Gly Ser Ile Ala 180 185 190 Arg Thr Tyr Phe Tyr Met Arg Asp Arg Tyr Asp Leu Asn Leu Ser Arg 195 200 205 Gln Gln Thr Gln Leu Phe Asn Ala Trp Asp Lys Leu Tyr Pro Val Thr 215 220 Asp Trp Glu Cys Gln Arg Asp Glu Arg Ile Ala Lys Val Gln Gly Asn 230 235 His Asn Pro Tyr Val Gln Arg Ala Cys Gln Ala Gln Lys Ser 245 255 250

<210> 9860 <211> 250

<212> PRT

<213> Enterobacter cloacae

<400> 9860

His Met Glu Phe Leu Thr Met Arg Ile Pro Arg Ile Tyr His Pro Glu Leu Ile Thr Pro Gly Gly Glu Ile Ala Leu Ser Asp Asp Ala Ala Asn His Val Gly Arg Val Leu Arg Met Gly Ala Gly Gln Ala Ile Gln Leu Phe Asp Gly Ser Asn Gln Val Phe Asp Ala Glu Ile Thr Arg Ala Asp Lys Lys Ser Val His Val Lys Val Leu Arg Gly Asp Val Asp Asp Arg 70 75 Glu Ser Pro Leu His Ile His Leu Gly Gln Val Met Ser Arg Gly Glu 90 85 Lys Met Glu Phe Thr Ile Gln Lys Ser Ile Glu Leu Gly Val Ser Leu 105 100 Ile Thr Pro Leu Phe Ser Glu Arg Cys Gly Val Lys Leu Asp Ala Glu 120 125 Arg Leu Asn Lys Lys Ile Gln Gln Trp Gln Lys Ile Ala Ile Ala Ala 135

Cys Glu Gln Ser Gly Arg Asn Arg Ile Pro Glu Ile Arg Pro Ala Met 150 155 Asp Leu Glu Asp Trp Cys Ala Glu Glu Glu Ser Gly Leu Lys Leu Asn 165 170 Leu His Pro Arg Ala Ser Ala Ser Ile Asn Thr Leu Pro Leu Pro Val 180 185 Glu Arg Val Arg Leu Leu Ile Gly Pro Glu Gly Gly Leu Ser Ala Asp 200 Glu Ile Ala Met Thr Ala Arg Tyr Gln Phe Thr Asp Ile Leu Leu Gly 215 220 Pro Arg Val Leu Arg Thr Glu Thr Thr Ala Leu Thr Ala Ile Thr Ala 235 230 Leu Gln Val Arg Phe Gly Asp Leu Gly 245

<210> 9861

<211> 320

<212> PRT

<213> Enterobacter cloacae

<400> 9861 Pro Glu Lys Lys Met Ile Lys Leu Gly Ile Val Met Asp Pro Ile Ala 10 Asn Ile Asn Ile Lys Lys Asp Ser Ser Phe Ala Met Leu Leu Glu Ala 25 Gln Arg Arg Gly Tyr Glu Leu His Tyr Met Glu Met Asn Asp Leu Tyr 40 Leu Ile Asn Gly Glu Ala Arg Ala Arg Thr Arg Ile Val Asn Val Glu Gln Asn Tyr Glu Lys Trp Tyr Glu Phe Gly Thr Glu Gln Asp Ile Ala 70 75 Leu Ala Asp Leu Asn Val Ile Leu Met Arg Lys Asp Pro Pro Phe Asp 90 Thr Glu Tyr Ile Tyr Ser Thr Tyr Ile Leu Glu Arg Ala Glu Glu Lys 105 Gly Thr Leu Ile Val Asn Lys Pro Gln Ser Leu Arg Asp Cys Asn Glu 120 125 115 Lys Leu Tyr Thr Ala Trp Phe Ser Asp Leu Thr Pro Glu Thr Leu Val 135 140 Thr Arg Ser Lys Thr Gln Leu Lys Glu Phe Trp Gln Lys His Gly Asp 150 155 Ile Ile Met Lys Pro Leu Asp Gly Met Gly Gly Ala Ser Ile Phe Arg 170 165 Val Lys Glu Gly Asp Pro Asn Ile Gly Val Ile Ala Glu Thr Leu Thr 190 180 185 Glu Leu Gly Thr Arg Tyr Cys Met Ala Gln Asn Tyr Leu Pro Ala Ile 195 200 205 Lys Asp Gly Asp Lys Arg Val Leu Val Val Asp Gly Glu Pro Val Pro 215 220 Tyr Cys Leu Ala Arg Ile Pro Gln Gly Gly Glu Thr Arg Gly Asn Leu 230 235 Ala Ala Gly Gly Arg Gly Glu Pro Arg Pro Leu Ser Glu Ser Asp Trp 245 250 255 Glu Ile Ala Arg Arg Val Gly Pro Thr Leu Lys Ala Lys Gly Leu Ile 265 270 Phe Val Gly Leu Asp Ile Ile Gly Asp Arg Leu Thr Glu Val Asn Val 280 285 Thr Ser Pro Thr Cys Ile Arg Glu Ile Glu Ala Glu Phe Pro Ile Ser 295 300 Ile Thr Gly Met Leu Met Asp Ala Ile Glu Lys Arg Leu Gln Lys 320 315

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<210> 9862
<211> 106
<212> PRT
<213> Enterobacter cloacae
<400> 9862
Leu Arg Thr Gly Ser Phe Ser Cys Ala Gly Lys Val Ser Thr Arg Arg
Ser Ile Ala Cys Ala Ala Pro Arg Val Cys Ser Val Ala Asn Thr Arg
                                 25
Trp Pro Val Ser Ala Ala Val Ser Ala Arg Arg Ile Val Ser Leu Ser
                             40
Arg Ser Ser Pro Ser Arg Ile Thr Ser Gly Ser Ser Arg Ser Ala Leu
Arg Arg Ala Ser Ala Lys Asp Gly Leu Cys Arg Pro Ile Ser Arg Cys
                    70
                                         75
Trp Ile Arg Gln Arg Ser Leu Trp Tyr Ile Asn Ser Thr Gly Ser Ser
                85
                                     90
Arg Val Arg I'le Cys Pro Ser Val Trp
            100
<210> 9863
<211> 109
<212> PRT
<213> Enterobacter cloacae
<400> 9863
Tyr Ala Ala Ala Gly Ala Val Asp Gly Val Met Ser Ala Val Ser Pro
Cys Ala Asp Gly Leu Val Leu Arg Leu Tyr Ile Gln Pro Lys Ala Ser
            20
                                25
                                                     30
Arg Asp Ser Ile Val Gly Leu His Gly Asp Glu Leu Lys Val Ala Ile
        35
                            40
Thr Ala Pro Pro Val Asp Gly Gln Ala Asn Ala His Leu Thr Lys Tyr
                        55
Leu Val Lys Gln Phe Arg Val Ala Lys Ser Gln Val Ile Ile Glu Lys
                    70
                                         75
Gly Glu Leu Gly Arg His Lys Gln Val Lys Ile Leu Asn Pro Gln Ser
                85
                                    90
Ile Pro Thr Glu Val Ala Ala Leu Thr Glu Gln Asp
            100
<210> 9864
<211> 199
<212> PRT
<213> Enterobacter cloacae
<400> 9864
Thr Met Gln Lys Val Val Leu Ala Thr Gly Asn Ala Gly Lys Val Arg
                                    10
Glu Leu Ala Ser Leu Leu Asn Asp Phe Gly Leu Asp Val Val Ala Gln
                                25
Thr Glu Leu Gly Val Asp Ser Ala Glu Glu Thr Gly Leu Thr Phe Ile
                            40
Glu Asn Ala Ile Leu Lys Ala Arg His Ala Ala Gln Val Thr Gly Leu
                        55
Pro Ala Ile Ala Asp Asp Ser Gly Leu Ala Val Asp Phe Leu Gly Gly
                    70
                                        75
Ala Pro Gly Ile Tyr Ser Ala Arg Tyr Ser Gly Pro Asp Ala Thr Asp
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Gln Gln Asn Leu Glu Lys Leu Leu Val Ala Leu Lys Asp Val Pro Asp 100 105 Glu Gln Arg Thr Ala Gln Phe His Cys Val Leu Val Tyr Met Arg His 120 125 Ala Glu Asp Pro Thr Pro Ile Val Cys His Gly Ser Trp Pro Gly Val 135 140 Ile Thr Arg Glu Ala Ala Gly Asn Gly Gly Phe Gly Tyr Asp Pro Ile 150 155 Phe Phe Val Pro Thr Glu Gly Lys Thr Ala Ala Glu Leu Thr Arg Glu 170 Glu Lys Ser Ala Ile Ser His Arg Gly Arg Ala Leu Lys Leu Leu Leu 180 185 Glu Ala Leu Arg Asn Gly

195

<210> 9865

<211> 129

<212> PRT

<213> Enterobacter cloacae

<400> 9865

Gly Lys Gly Trp Gln Ser Val Gly Met Gln Thr Ile Arg Ser Tyr Ala 10 1.5 Lys Gln Leu Arg Arg Glu Leu Thr Gln Glu Glu Arg Arg Leu Trp Tyr 20 Leu Leu Arg Ser Arg Arg Phe Glu Asn Tyr Lys Phe Arg Arg Gln His 40 Pro Val Gly Asn Tyr Ile Leu Asp Phe Ala Cys Cys Ala Ala Arg Leu 60 Ala Val Glu Leu Asp Gly Gly Gln His Asp Glu Asn Gln Glu Tyr Asp 70 75 Arg Gln Arg Thr Leu Trp Leu Asn His Lys Asp Trp His Val Ile Arg 90 Phe Trp Asn Asn Glu Leu Trp Asn Asn Glu Glu Ala Val Leu Glu Arg 100 105 Ile Leu Glu Thr Leu Gln Ala Leu Gln Pro Ser Pro Arg Pro Ser Pro 120

<210> 9866 <211> 357 <212> PRT <213> Enterobacter cloacae

<400> 9866

Leu Ser Glu Ser Met Thr Met Gln Ala Ser Gln Phe Ser Ala Gln Val Leu Asp Trp Tyr Asp Lys Tyr Gly Arg Lys Thr Leu Pro Trp Gln Ile 25 Glu Lys Thr Pro Tyr Lys Val Trp Leu Ser Glu Val Met Leu Gln Gln 40 45 Thr Gln Val Ala Thr Val Ile Pro Tyr Phe Glu Arg Phe Met Ala Arg 55 Phe Pro Thr Val Thr Asp Leu Ala Asn Ala Pro Leu Asp Glu Val Leu 70 75 His Leu Trp Thr Gly Leu Gly Tyr Tyr Ala Arg Ala Arg Asn Leu His 85 90 Lys Ala Ala Gln Gln Val Ala Thr Arg His Asn Gly Lys Phe Pro Glu 105 Thr Phe Asp Glu Val Ala Asp Leu Pro Gly Val Gly Arg Ser Thr Ala

```
120
                                                 125
        115
Gly Ala Ile Leu Ser Leu Ser Leu Gly Lys His Phe Pro Ile Leu Asp
                                            140
                       135
Gly Asn Val Lys Arg Val Leu Ala Arg Cys Tyr Ala Val Asp Gly Trp
                    150
                                       155
Pro Gly Lys Lys Glu Val Glu Lys Arg Leu Trp Glu Ile Ser Glu Ala
               165
                                    170
Val Thr Pro Ala Lys Gly Val Glu Arg Phe Asn Gln Ala Met Met Asp
                                185
Leu Gly Ala Met Val Cys Thr Arg Ser Lys Pro Lys Cys Glu Leu Cys
                            200
                                                 205
Pro Val Asn Asn Leu Cys Val Ala Tyr Ala Asn His Thr Trp Ala Gln
                        215
Tyr Pro Gly Lys Lys Pro Lys Gln Thr Leu Pro Glu Arg Thr Gly Tyr
                    230
                                        235
Met Leu Leu Met Gln His Gly Asp Glu Val Phe Leu Ala Gln Arg Pro
                245
                                    250
Pro Ser Gly Leu Trp Gly Gly Leu Tyr Cys Phe Pro Gln Phe Glu Asp
            260
                                265
Glu Ala Ser Leu Arg Ala Trp Leu Glu Gln Arg Gly Ile Ala Ala Glu
        275
                            280
Thr Leu Thr Gln Leu Asn Ala Phe Arg His Thr Phe Ser His Phe His
                        295
                                            300
Leu Asp Ile Val Pro Met Trp Leu Pro Val Ser Ser Phe Thr Ser Cys
                                        315
                    310
Met Asp Glu Gly Thr Ala Leu Trp Tyr Asn Leu Ala Gln Pro Pro Ser
                325
                                    330
Val Gly Leu Ala Ala Pro Val Glu Arg Leu Leu Gln Gln Leu Arg Val
                                345
            340
Gly Ala Met Val
        355
<210> 9867
<211> 420
<212> PRT
<213> Enterobacter cloacae
<400> 9867
Thr Ser Cys Ser Arg Val Lys Thr Ser Thr Ser Lys Ala Ile Arg His
Arg Lys Asn Asn Asn Ala Gln Leu Leu Pro Gly Cys Ala Ala Leu Ala
Arg Ala Tyr Gly Phe Val Gly Arg Val Ser Ala Ala Pro Pro Gly Asn
                            40
Ser Asn Pro Lys Ala Asn Thr Thr Arg Thr Pro Gly Met Met Lys Lys
Leu Leu Ala Leu Ala Leu Val Ala Pro Leu Leu Val Ser Cys Ser Ser
Lys Lys Gly Asp Glu Tyr Asn Glu Ala Trp Val Lys Asp Thr Asn Gly
                                    90
Phe Asp Ile Leu Met Gly Gln Phe Ala His Asn Ile Glu Asn Ile Trp
                                105
Gly Phe Asn Glu Val Leu Ile Ala Gly Pro Lys Asp Tyr Val Lys Tyr
                            120
                                                 125
        115
Thr Asp Ala Tyr Gln Thr Arg Ser His Ile Asn Phe Asp Asp Gly Thr
```

135

150

Ile Thr Val Glu Thr Ile Ala Gly Thr Glu Pro Ala Ala His Leu Arg

Gln Ala Ile Ile Lys Thr Leu Leu Met Gly Asp Asp Pro Gly Ser Ile

Asp Leu Tyr Ser Asp Ala Asp Asp Ile Thr Ile Ser Lys Glu Pro Phe

140

155

```
180
                                185
                                                    190
Leu Tyr Gly Gln Val Val Asp Gln Thr Gly Gln Pro Ile Arg Trp Glu
       195
                          200
                                                205
Gly Arg Ala Thr Lys Phe Ala Asp Tyr Leu Leu Gln Thr Arg Leu Lys
                       215
                                           220
Ser Arg Thr Asn Gly Leu Lys Val Ile Tyr Ser Val Thr Ile Asn Leu
                  230
                                       235
Val Pro Asn His Leu Asp Lys Arg Ala His Lys Tyr Leu Gly Met Val
                245
                                    250
Arg Gln Ala Ser Arg Lys Tyr Gly Val Asp Glu Ser Leu Ile Leu Ala
                                265
Ile Met Gln Thr Glu Ser Ser Phe Asn Pro Tyr Ala Val Ser Arg Ser
                            280
Asp Ala Leu Gly Leu Met Gln Val Val Gln His Ser Ala Gly Lys Asp
                        295
Val Phe Arg Ala Gln Gly Lys Ser Gly Thr Pro Ser Arg Arg Tyr Leu
                    310
                                        315
Phe Asp Pro Gln Ser Asn Ile Asp Thr Gly Thr Ala Tyr Leu Ala Met
                                    330
                325
Leu Asn Asn Val Tyr Leu Gly Gly Ile Asp Asn Pro Thr Ser Arg Arg
                                345
            340
Tyr Ala Val Ile Thr Ala Tyr Asn Gly Gly Ala Ser Ser Val Met Arg
                            360
                                                365
Val Leu Ser Asn Asp Lys Val Gln Ala Ala Asn Ile Ile Asn Ser Met
                        375
                                            380
Ala Pro Gly Asp Val Tyr Asp Thr Leu Thr Thr Arg His Pro Cys Ala
                    390
                                        395
Glu Ser Arg Arg Tyr Met Tyr Lys Val Asn Thr Ala Gln Lys Asn Tyr
                405
                                    410
Arg Arg Arg
            420
<210> 9868
<211> 561
<212> PRT
<213> Enterobacter cloacae
<400> 9868
Lys Met Ile Tyr Ser Ala Asp Leu Leu Ile Ser Arg Val Ile Val Met
                                    10
Lys Val Ser Phe Gln Ile Lys Leu Phe Ile Ser Leu Val Ala Phe Phe
Ser Val Leu Phe Ala Leu Leu Gly Gly Tyr Tyr Tyr Val Asp Val Gly
                            40
Arg Gln Leu Tyr Gln Glu Met Ser Ala Arg Ala Lys Ile Gln Ala Glu
Glu Ile Ala Leu Ile Pro Thr Leu Arg Lys Glu Val Glu Gln Lys Asp
                                        75
Ile Gln Gly Ile His Asp Phe Met Gln Lys Ile Ala Ala Arg Ser Asp
                                    90
                85
Ala Ser Phe Ile Val Ile Gly Asp Asn Lys Gly Leu His Leu Phe His
                                105
                                                    110
Ser Val Phe Ala Asp Arg Val Gly Lys Thr Leu Val Gly Gly Asp Asn
                            120
                                                125
Asp Glu Val Leu His Gly Lys Ser Thr Ile Thr Ile Arg Lys Gly Gly
                        135
                                            140
Leu Gly Ile Ser Leu Arg Ser Lys Ala Pro Ile Phe Asn Asp Ala Gly
                   150
                                       155
```

Gln Val Val Gly Ile Val Ser Val Gly Tyr Leu Thr Ser Tyr Leu Asp

Thr Ile Thr Val Ser Lys Val Val Asn Ile Leu Ile Ala Ala Val Leu

165

```
180
                                185
                                                     190
Leu Leu Ile Ala Leu Phe Ile Phe Ser Trp Phe Phe Thr Arg Ser Ile
                            200
                                               205
Lys Lys Gln Ile Phe Ser Leu Glu Pro Arg Glu Ile Gly Leu Leu Val
                        215
                                            220
Arg Gln Gln Lys Ala Met Met Glu Ser Ile Tyr Glu Gly Val Ile Ala
                    230
                                        235
Ile Asp Asp Asp Leu Arg Ile Glu Val Ile Asn Gln Ala Ala Arg Lys
                245
                                    250
Leu Leu Gly Leu Arg Gln Pro Ala Arg Glu Leu Arg Gly Gln Leu Ile
            260
                                265
Ser Gln Val Ile Ala Pro Val Pro Phe Asn Ala Gln Thr Met Leu
                            280
        275
Ala Lys Asp Thr His Asp Glu Ile Cys Arg Phe Asn Asp Leu Thr Val
                        295
                                            300
Ile Ala Ser Arg Val Arg Ile Met Leu Glu Asp Ala Leu Gln Gly Trp
                                        315
                    310
Val Ile Thr Phe Arg Asp Arg Asn Glu Ile Asp Ser Leu Ser Ala Gln
                                    330
                325
Leu Ser Gln Val Lys Arg Tyr Val Asp Asn Leu Arg Ile Met Arg His
                                345
            340
Glu Gln Leu Asn Arg Met Thr Thr Leu Ser Gly Leu Leu His Met Gly
                            360
                                                 365
Arg Tyr Asp Glu Ala Ile Arg Tyr Ile Gln Ala Gln Ser Glu His Ala
    370
                        375
                                            380
Gln Glu Leu Leu Asp Phe Ile Ser Ser Arg Phe Ser Ser Pro Thr Leu
                    390
                                        395
Cys Gly Leu Leu Gly Lys Ala Ala Arg Ala Arg Glu Lys Gly Val
                                    410
Glu Leu Ser Phe Asp Pro Ala Cys Arg Val Asp Lys Pro Phe Leu Pro
            420
                                425
Leu Leu Glu Ser Glu Leu Ile Ser Ile Ile Gly Asn Leu Leu Asp Asn
                            440
Ala Ile Glu Ala Thr Gln Arg Ala Pro Leu Pro His Ala Pro Val Asp
                        455
Val Leu Ile Lys Leu Asn Glu Gln Glu Leu Ile Ile Glu Val Ala Asp
                    470
Gln Gly Val Gly Ile Thr Pro Glu Ile Arg Asp Arg Ile Phe Glu Arg
                485
                                    490
Gly Ile Thr Thr Lys Thr Arg Gly Asp His Gly Ile Gly Leu Tyr Leu
                                505
Ile Glu Ser Tyr Val Thr Gln Ala Gly Gly Ala Ile Glu Val Ala Asp
                            520
                                                 525
Asn Thr Pro Arg Gly Ala Ile Phe Ser Leu Phe Ile Pro Ala Thr Gly
                        535
                                             540
Thr Ala Arg His Pro Val Gln Glu Leu Glu Asp Thr Asp Tyr Ala Thr
                    550
                                        555
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<210> 9869
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<sup>&</sup>lt;211> 213

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<sup>&</sup>lt;400> 9869

Glu Ile Leu Ser Ala Ile Pro Asn Arg Ser Ile Ala Ala Arg Val Ser 1 5 10 15
Pro Pro Pro Ala Ile Glu Asn Ala Ser Leu Ser Ala Ile Ala Leu Ala 20 25 30
Thr Ile Ser Val Pro Leu Arg Lys Phe Gly Asn Ser Asn Thr Pro Thr

```
40
Gly Pro Phe His Arg Ile Val Phe Ala Phe Leu Arg Ile Ser Ala Ser
                        55
                                            60
Phe Cys Ala Glu Thr Ser Pro Arg Ser Arg Ile Cys Ser Ser Ser Leu
                    70
                                        75
Met Ser Leu Thr Asp Phe Arg Val Ala Val Ala Val Ser Glu Asn Ser
               85
                                    90
Val Ala Thr Arg Thr Ser Val Gly Thr Gly Ile Ser Gln Val Pro Ser
                                105
Arg Arg Leu Ala Ser Ser Thr Arg Ser Ala Ser Tyr Arg Asp Leu Pro
                            120
Thr Leu Trp Pro Cys Ala Ala Thr Lys Val Phe Ala Ile Pro Pro Pro
                        135
Thr Ile Ser Trp Ser Ala Ile Leu Asp Arg Glu Ser Ser Thr Val Ser
                    150
                                        155
Leu Val Glu Thr Leu Glu Pro Pro Thr Ile Ala Thr Ile Gly Arg Ala
                                    170
Gly Ser Phe Ser Ala Leu Pro Ser Ala Ser Ser Ser Ser Ala Ser Ser
                                185
Gly Pro Ala Gln Ala Thr Ser Ala Asn Leu Pro Ile Pro Trp Val Asp
       195
                            200
Ala Cys Ala Arg
    210
<210> 9870
<211> 282
<212> PRT
<213> Enterobacter cloacae
<400> 9870
Ile Phe Leu Ile Leu Ser Pro Thr Pro Ala Ser Leu Thr Val His Phe
Ser Glu Leu Ile Gln Ile Asn Glu Tyr Gly Ser Asn Ile Met Lys Met
                                25
Arg Ala Ile Gly Leu Ala Val Gly Thr Thr Leu Leu Ser Gly Cys
                            40
Gln Asn Met Asp Ser Asn Gly Leu Met Thr Ser Gly Ala Glu Ala Phe
                                            60
                        55
Gln Ala Tyr Ser Leu Ser Asp Ala Gln Val Lys Ala Leu Ser Asp Glu
                                        75
Ala Cys Lys Asp Met Asp Gly Lys Ala Thr Leu Ala Pro Ala Asn Ser
                                    90
Thr Tyr Thr Gln Arg Leu Asn Lys Ile Ala Ser Ala Leu Gly Asp Asn
            100
                                105
Ile Asn Gly Gln Pro Val Asn Tyr Lys Val Tyr Met Ala Lys Asp Val
        115
                            120
Asn Ala Phe Ala Met Ala Asn Gly Cys Ile Arg Val Tyr Ser Gly Leu
                        135
Met Asp Met Met Thr Asp Asn Glu Val Glu Ala Val Ile Gly His Glu
                    150
Met Gly His Val Ala Leu Gly His Val Lys Lys Gly Met Gln Val Ala
                165
                                    170
Leu Gly Thr Asn Ala Val Arg Ala Ala Ala Ser Ala Gly Gly Ile
                                185
            180
                                                    190
Val Gly Ser Leu Ser Gln Ser Gln Leu Gly Asp Val Gly Glu Lys Leu
                            200
        195
Val Asn Ser Gln Phe Ser Gln Arg Gln Glu Ser Glu Ala Asp Asp Tyr
                        215
                                            220
Ser Tyr Asp Leu Leu Arg Lys Arg Gly Ile Asn Pro Ser Gly Leu Ala
                    230
                                        235
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Thr Ser Phe Glu Lys Leu Ala Lys Leu Glu Glu Gly Arg Gln Ser Ser

245 250 Met Phe Asp Asp His Pro Ala Ser Val Glu Arg Ala Gln His Ile Arg 260 265 Asp Arg Met Ala Ala Asp Gly Ile Lys 275 <210> 9871 <211> 438 <212> PRT <213> Enterobacter cloacae <400> 9871 Phe Ile Phe Thr Lys Gln Arg Val Ser Gln Val Asn His Phe Ser Ser Val Thr Ile Thr Leu Met Lys Asn Ile Ser Tyr Lys Lys Arg Lys Ala 25 Asp Met Met Thr Ala Arg Trp Gln Gly Thr Ile Ala Leu Leu Leu Ile Ile Ser Tyr Val Asp Arg Val Asn Ile Ser Val Met Ile Leu 55 Asn Pro Glu Phe Ala Glu His Phe Gln Leu Asn Glu Asn Arg Met Leu 70 75 Gln Gly Met Leu Met Thr Cys Phe Leu Leu Gly Tyr Gly Phe Ser Ala 8.5 Leu Leu Thr Pro Val Ile Glu Ser Lys Leu His Tyr Arg Gln Gly 100 105 110 Leu Leu Ser Ser Ile Ala Ile Trp Ala Ala Val Cys Ala Val Ser Pro 120 125 Leu Leu Gly Ser Leu Thr Gly Met Leu Ile Ala Arg Val Ile Leu Gly 135 140 Ile Ala Glu Gly Pro Leu Phe Ser Leu Lys Thr Arg Phe Ile Ser Asp 150 155 Asn Phe Ser Ala Gln Glu Ile Gly Lys Pro Asn Ala Val Thr Ala Leu 175 165 170 Gly Val Ser Leu Gly Leu Ala Val Gly Phe Pro Leu Val Thr Trp Leu 180 185 Met Ser His Leu Gly Trp Ala Gly Ser Phe Tyr Thr Leu Ala Ala Ile 200 Asn Leu Leu Gly Gly Ser Leu Ile Trp Arg Phe Leu Pro Ala Pro 215 220 Arg Lys Leu Pro Thr Ala Lys Lys Pro Gly Phe Val His Thr Phe Thr 230 235 Leu Ala Trp Gln Thr Pro Leu Leu Gly Trp Ile Met Val Val Glu Ile 250 Ala Thr Leu Ser Tyr Leu Trp Gly Ser Ser Ala Trp Leu Pro Ala Trp 265 Leu Arg Asp Glu His His Phe Ser Leu His Ala Thr Gly Trp Leu Ala 280 Ala Ile Pro Phe Leu Leu Ser Leu Gly Ser Lys Phe Leu Gly Gly Val 295 300 Leu Leu Asp Lys Met Arg Pro Glu Gln Ala Pro Met Leu Phe Val Val 310 315 Gly Gly Ala Met Thr Ala Leu Ser Val Val Ala Leu Met Leu Ser His 330 325 Gln Pro Ala Trp Leu Ala Leu Phe Met Leu Ser Ala Asn Val Phe Trp 345 340 Gly Leu Gln Gly Ala Ala Ile Pro Ala Val Ile Gln His His Ala Ala 360 365 Arg Glu Ala Val Gly Ser Ala Tyr Gly Ile Ile Asn Gly Ile Gly Asn

375

Ile Cys Ala Ala Phe Ile Pro Leu Leu Met Gly Met Val Met Arg Ser

395 390 Val Gly Ser Val Ser Ser Gly Phe Ser Val Leu Val Val Ser Gln Val 405 410 Val Thr Leu Leu Ala Gly Gly Met Leu Leu Arg Met Arg Arg Ala 425 420 Ala Ala Ile Ser Ala 435 <210> 9872 <211> 232 <212> PRT <213> Enterobacter cloacae <400> 9872 Cys Gln Ala Ala Asp His Arg Arg Thr Gly Thr Arg Cys Glu Cys Arg 10 Ile Gln Ala Val Asp Val Glu Gly Gln Ile Asp Arg His Val Ala Asp 25 Asp Leu Leu Asn Leu Ser Gln Asn Ile Val His Ala Ala Ile Val His 45 Leu Ala Arg Val Glu Tyr Gly Glu Ala Val Val Phe Val Glu Leu Gly 55 Ala Asp Ala Asp Leu His Gly Val Val Arg Ile Asp Gln Ala Phe Leu 75 70 Arg Arg Val Glu His Gly Ala Val Val Glu Leu Thr Ala Val Arg 90 85 Val Gly Val Gly Val Arg Ile Glu Val His Gln Arg His Phe Thr Glu 100 105 110 Val Leu Arg Val Gly Ala Gln Gln Arg Gln Gly His Glu Val Val Thr 120 Ala Glu Gly Glu His Ala Phe Thr Gly Arg Gln Gln Leu Leu Gly Val 135 140 Arg Leu Gln Phe Phe Ala His Leu Thr Arg Val Ala Glu Gly Val His 150 155 Gln Ile Ala Ala Val His His Val Gln Thr Leu Ala His Val Glu Val 165 170 175 Pro Arg Glu Ala Val Val Leu Pro Gly Gln Val Ser Gly Asn Leu Thr 180 185 Asp Arg Arg Ala Met Thr Thr Arg Ala Thr Gly Arg Cys His 200 205 Val Glu Arg Tyr Ala Gly Asp His Pro Val Arg Ile Ala Val Val Arg 215 Leu Glu Val His Arg Lys Ala 230 <210> 9873 <211> 475 <212> PRT <213> Enterobacter cloacae <400> 9873 Lys Leu Ile Thr Gln Leu Glu Gly Ile Met Pro Asp Asn Asn Lys Gln 10 Gly Arg Thr Ser Asn Lys Ala Met Thr Phe Phe Val Cys Phe Leu Ala 25 Ala Leu Ala Gly Leu Leu Phe Gly Leu Asp Ile Gly Val Ile Ala Gly 40 Ala Leu Pro Phe Ile Thr Asp Glu Phe Gln Ile Ser Ala His Thr Gln 55 60 Glu Trp Val Val Ser Ser Met Met Phe Gly Ala Ala Val Gly Ala Val 75

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Gly Ser Gly Trp Leu Ser Phe Lys Leu Gly Arg Lys Lys Ser Leu Met
                85
                                    90
Ile Gly Ala Ile Leu Phe Val Ala Gly Ser Leu Phe Ser Ala Ala Ala
            100
                                105
Pro Asn Val Glu Val Leu Ile Ile Ser Arg Val Leu Leu Gly Leu Ala
                            120
Val Gly Val Ala Ser Tyr Thr Ala Pro Leu Tyr Leu Ser Glu Ile Ala
                        135
                                            140
Pro Glu Lys Ile Arg Gly Ser Met Ile Ser Met Tyr Gln Leu Met Ile
                    150
                                        155
Thr Ile Gly Ile Leu Gly Ala Tyr Leu Ser Asp Thr Ala Phe Ser Tyr
                165
                                    170
Ser Gly Ala Trp Arg Trp Met Leu Gly Val Ile Ile Ile Pro Ala Ile
                                185
Leu Leu Ile Gly Val Phe Phe Leu Pro Asp Ser Pro Arg Trp Phe
                            200
Ala Ala Lys Arg Arg Phe His Asp Ala Glu Arg Val Leu Leu Arg Leu
                        215
                                            220
Arg Asp Thr Ser Ala Glu Ala Lys Asn Glu Leu Glu Glu Ile Arg Glu
                    230
                                        235
Ser Leu Lys Val Lys Gln Ser Gly Trp Ala Leu Phe Lys Glu Asn Ser
                                    250
                245
Asn Phe Arg Arg Ala Val Phe Leu Gly Val Leu Leu Gln Ile Met Gln
            260
                                265
Gln Phe Thr Gly Met Asn Val Ile Met Tyr Tyr Ala Pro Lys Ile Phe
                           280
        275
Glu Leu Ala Gly Tyr Thr Asn Thr Thr Glu Gln Met Trp Gly Thr Val
                        295
                                            300
Ile Val Gly Leu Thr Asn Val Leu Ala Thr Phe Ile Ala Ile Gly Leu
                    310
                                        315
Val Asp Arg Trp Gly Arg Lys Pro Thr Leu Thr Leu Gly Phe Leu Val
                325
                                    330
Met Ala Val Gly Met Gly Val Leu Gly Thr Met His Met Gly Ile
            340
                                345
His Ser Pro Thr Ala Gln Tyr Phe Ala Val Ala Met Leu Leu Met Phe
                            360
Ile Ile Gly Phe Ala Met Ser Ala Gly Pro Leu Ile Trp Val Leu Cys
                        375
Ser Glu Ile Gln Pro Leu Lys Gly Arg Asp Phe Gly Ile Thr Cys Ser
                    390
Thr Ala Thr Asn Trp Ile Ala Asn Met Ile Val Gly Ala Thr Phe Leu
                405
                                    410
Thr Met Leu Asn Thr Leu Gly Asn Ala Asn Thr Phe Trp Val Tyr Ala
                                425
Gly Leu Asn Leu Phe Phe Ile Val Leu Thr Ile Trp Leu Val Pro Glu
       435
                            440
                                                445
Thr Lys His Val Ser Leu Glu His Ile Glu Arg Asn Leu Met Lys Gly
                        455
Arg Pro Leu Arg Glu Ile Gly Ala His Asp
                    470
<210> 9874
<211> 151
```

<212> PRT

<213> Enterobacter cloacae

<400> 9874

Tyr Ser Asp His Ala Trp Arg Cys Gly Ala Arg Val Met Ser Gly Thr 1 5 10 15 Leu Leu Ala Phe Asp Phe Gly Thr Lys Ser Ile Gly Val Ala Val Gly 20 25 30

```
Gln Arg Ile Thr Gly Thr Ala Arg Pro Leu Thr Ala Leu Lys Ala Asn
                             40
Asp Gly Thr Pro Asp Trp Asn Leu Ile Glu Arg Leu Leu Lys Glu Trp
                        55
                                             60
Gln Pro Asp Asp Val Ile Val Gly Leu Pro Leu Asn Met Asp Gly Thr
                    70
                                         75
Glu Gln Pro Leu Thr Ala Arg Ala Arg Lys Phe Ala Asn Lys Ile His
                85
                                     90
Gly Arg Phe Gly Val Ser Val Lys Leu His Asp Glu Arg Leu Ser Thr
                                105
Val Glu Ala Arg Ala Gly Leu Phe Glu His Gly Gly Phe Arg Ala Leu
                            120
Asn Lys Gly Ser Val Asp Ser Ala Ser Ala Val Ile Ile Leu Glu Ser
                        135
Tyr Phe Asp Gln Gly Tyr
<210> 9875
<211> 140
<212> PRT
<213> Enterobacter cloacae
<400> 9875
Cys Pro Ala Val Ala Arg Phe Cys Leu Arg Gly Ser Gly Leu Pro Pro
                                     10
Pro Thr Tyr Ser Pro Val Ala His Thr Ala Pro Arg Ala Arg Pro Gly
            20
                                 25
His Pro Asp Ala Ala Ser Ala Pro Glu Pro His Ala Gly Phe Pro Pro
                             40
Val Asp Tyr Ala Pro Asp Leu Ser Pro Ala Pro Glu Arg Tyr Arg Pro
Gly Ala Arg Ser Pro Ala Pro His Arg Ala Cys Ala Ala Trp Pro Thr
                                         75
Pro Asp Gly Arg Phe Pro Pro Pro Ser Ala Pro Gly Val Ser Ser Arg
                                     90
                85
Cys Arg Ala Ala His Gln Ala Glu Ser His Pro Asp Leu His Ala Ala
                                 105
            100
Arg Cys Ala Gly Pro Arg Gln Arg Thr Gly Cys Ala Gly Leu Ser Pro
                             120
Ala Ala Gly Ser Gly Asn Val His Ser Gly Thr
<210> 9876
<211> 239
<212> PRT
<213> Enterobacter cloacae
<400> 9876
Thr Thr Pro Arg Lys Met Asn Asp Ile Ala His Asn Leu Ala Gln Val
Arg Asp Lys Ile Ser Ala Ala Ala Thr Arg Cys Gly Arg Ala Pro Glu
Glu Ile Thr Leu Leu Ala Val Ser Lys Thr Lys Pro Ala Ser Ala Ile
Ala Glu Ala Ile Ala Ala Gly His Arg Ala Phe Gly Glu Asn Tyr Val
                        55
Gln Glu Gly Val Asp Lys Ile Leu Ala Phe Arg Glu Arg Gly Asn Ala
                    70
                                         75
Asp Leu Gln Trp His Phe Ile Gly Pro Leu Gln Ser Asn Lys Ser Arg
```

Leu Val Ala Glu His Phe Asp Trp Cys His Thr Ile Asp Arg Leu Arg

```
100
                                105
                                                    110
Ile Ala Thr Arg Leu Ser Asp Gln Arg Pro Ile Glu Ile Pro Ala Leu
                          120
                                               125
Asn Val Leu Ile Gln Ile Asn Ile Ser Asp Glu Asn Ser Lys Ser Gly
                       135
                                           140
Ile Thr Leu Ser Glu Leu Asp Ala Leu Ala Ala Asp Val Ala Ala Leu
                   150
                                       155
Pro Arg Leu Thr Leu Arg Gly Leu Met Ala Ile Pro Ala Pro Glu Ser
               165
                                    170
Ser Tyr Glu Arg Gln Phe Ala Val Ala Gln Gln Met Ala Val Ala Phe
                                185
Glu Ala Leu Lys Ala Arg Tyr Asp Thr Val Asp Thr Leu Ser Leu Gly
                            200
Met Ser Asp Asp Met Glu Ala Ala Ile Ala Ala Gly Ser Thr Met Val
                        215
                                            220
Arg Ile Gly Thr Ala Ile Phe Gly Ala Arg Asp Tyr Pro Gln
                    230
<210> 9877
<211> 195
<212> PRT
<213> Enterobacter cloacae
<400> 9877
Gly Asn Leu Arg Asn Ala Met Lys Thr Leu Thr Phe Leu Leu Ser Thr
                                    10
Val Ile Glu Leu Tyr Thr Met Ala Leu Leu Leu Arg Val Trp Met Gln
            20
                                25
Trp Ala Arg Cys Asp Phe Tyr Asn Pro Phe Ser Gln Phe Ile Val Lys
                            40
                                                45
Ile Thr Gln Pro Ile Val Gly Pro Leu Arg Arg Ile Ile Pro Ala Met
                        55
                                            60
Gly Pro Ile Asp Ser Ser Ser Leu Leu Met Ala Phe Ile Leu Ser Val
                    70
                                        75
Ile Lys Ala Ile Val Leu Phe Met Val Ile Thr Phe Gln Pro Ile Ile
               85
                                    90
Trp Ile Ser Ala Val Leu Ile Leu Val Lys Thr Val Gly Ser Leu Ile
                                105
            100
Phe Trp Val Leu Leu Val Met Ala Ile Met Ser Trp Val Ser Arg Gly
                            120
                                                125
Arg Ser Pro Val Glu Tyr Ala Leu Ile Gln Leu Thr Glu Pro Leu Leu
                        135
                                            140
Arg Pro Ile Arg Ser Leu Leu Pro Ala Met Gly Gly Ile Asp Phe Ser
                   150
                                        155
Pro Met Leu Leu Val Leu Leu Tyr Val Leu Asn Met Gly Ile Ala
                                    170
Glu Leu Leu Gln Ala Thr Gly Asn Met Leu Leu Pro Gly Leu Trp Met
            180
                                185
Ala Leu
       195
<210> 9878
<211> 391
<212> PRT
<213> Enterobacter cloacae
<400> 9878
Asn Cys Tyr Trp Lys His Cys Val Met Ala Asn Leu Pro Pro Leu Ser
                                    1.0
Leu Tyr Ile His Ile Pro Trp Cys Val Gln Lys Cys Pro Tyr Cys Asp
```

25

```
Phe Asn Ser His Ala Leu Lys Gly Glu Val Pro His Asp Asp Tyr Val
                            40
Ala His Leu Leu Ala Asp Leu Asp Ala Asp Val Pro Tyr Ala Gln Gly
                        55
                                            60
Arg Glu Val Lys Thr Ile Phe Ile Gly Gly Gly Thr Pro Ser Leu Leu
                    70
                                        75
Ser Gly Pro Ala Met Gln Thr Leu Leu Asp Gly Val Arg Ala Arg Leu
                85
                                    90
Asn Leu Ala Ala Asp Ala Glu Ile Thr Met Glu Ala Asn Pro Gly Thr
                                105
            100
Val Glu Ala Asp Arg Phe Val Glu Tyr Gln Arg Ala Gly Val Asn Arg
                            120
                                                125
Ile Ser Ile Gly Val Gln Ser Phe Ser Glu Pro Lys Leu Lys Arg Leu
                        135
                                            140
Gly Arg Ile His Gly Pro Glu Glu Ala Lys Arg Ala Ala Asn Leu Ala
                    150
                                        155
Thr Gly Leu Gly Leu Arg Ser Phe Asn Leu Asp Leu Met His Gly Leu
           . 165
                                    170
Pro Asp Gln Ser Leu Glu Glu Ala Leu Asp Asp Leu Arg Gln Ala Ile
                                185
Glu Leu Asn Pro Pro His Leu Ser Trp Tyr Gln Leu Thr Ile Glu Pro
                                                205
                            200
Asn Thr Leu Phe Gly Ser Arg Pro Pro Val Leu Pro Asp Asp Ala
                        215
                                            220
Leu Trp Asp Ile Phe Glu Gln Gly His Gln Leu Leu Thr Ala Ala Gly
                    230
                                        235
Tyr Gln Gln Tyr Glu Thr Ser Ala Tyr Ala Lys Pro Gly Tyr Gln Cys
                                    250
                245
Gln His Asn Leu Asn Tyr Trp Arg Phe Gly Asp Tyr Leu Gly Ile Gly
                                                    270
            260
                                265
Cys Gly Ala His Gly Lys Val Thr Phe Pro Asp Gly Arg Ile Leu Arg
                            280
                                                285
Thr Ala Lys Thr Arg His Pro Arg Gly Tyr Met Glu Gly Arg Tyr Leu
                        295
                                            300
Glu Arg Gln His Asp Val Glu Ala Val Asp Lys Pro Phe Glu Phe Phe
                                        315
                    310
Met Asn Arg Phe Arg Leu Leu Glu Ala Ala Pro Arg Ala Glu Phe Thr
                325
                                    330
Arg Tyr Thr Gly Leu Pro Glu Ser Val Ile Arg Pro Gln Ile Asp Glu
            340
                                345
Ala Leu Ala Gln Gly Tyr Leu Thr Glu Cys Asp Val Ser Trp Gln Ile
                            360
                                                365
Thr Glu His Gly Lys Leu Phe Leu Asn Ser Leu Leu Glu Leu Phe Leu
                        375
Ala Glu Asn Pro Glu Gly
                    390
<210> 9879
<211> 448
<212> PRT
<213> Enterobacter cloacae
<400> 9879
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 Arg Cys Gln Leu Ile Glu Leu His Gln Ile Thr Thr Leu Asn Val Pro

 1
 5
 10
 15

 Ile Thr Thr Tyr Leu Pro Leu Thr Cys Glu Glu Ser Asn Met Asn Leu 20
 25
 30

 Lys Leu Gln Leu Lys Ile Leu Ser Phe Leu Gln Phe Cys Leu Trp Gly 35
 40
 45

 Ser Trp Leu Thr Thr Leu Gly Ser Tyr Met Phe Val Thr Leu Lys Phe 50
 55
 60

```
Asp Gly Ala Ser Ile Gly Ala Val Tyr Ser Ser Leu Gly Ile Ala Ala
                    70
                                        75
Val Phe Met Pro Thr Leu Leu Gly Ile Val Ala Asp Lys Trp Leu Ser
                85
                                    90
Ala Lys Trp Leu Tyr Met Leu Cys His Leu Val Gly Ala Gly Thr Leu
            100
                                105
Phe Met Ala Ala Glu Val Thr Thr Pro Gly Ala Met Phe Met Val Ile
                            120
Leu Leu Asn Ser Leu Ala Tyr Met Pro Thr Leu Gly Leu Ile Asn Thr
                        135
                                            140
Ile Ser Tyr Tyr Arg Leu Lys Ser Ala Gly Leu Asp Ile Val Thr Asp
                    150
                                        155
Phe Pro Pro Ile Arg Ile Trp Gly Thr' Ile Gly Phe Ile Met Ala Met
                                    170
                165
Trp Gly Val Ser Phe Ala Gly Phe Glu Leu Ser His Met Gln Leu Tyr
                                185
                                                     190
            180
Ile Gly Ala Ala Leu Ser Val Leu Leu Ala Leu Phe Thr Leu Thr Leu
                            200
                                                 205
Pro Thr Ile Pro Val Ser Asn Gln Gln Lys Asn Gln Ser Trp Ser Thr
                                            220
                        215
Met Leu Gly Leu Asp Ala Phe Ala Leu Phe Lys Asn Lys Arg Met Ala
                    230
                                        235
Ile Phe Phe Ile Phe Ser Met Leu Leu Gly Ala Glu Leu Gln Ile Thr
                                    250
                245
Asn Met Phe Gly Asn Thr Phe Leu His Ser Phe Asp Asn Asp Pro Leu
                                                     270
            260
                                265
Phe Ala Gly Ser Phe Ile Val Glu His Ala Ser Val Met Met Ser Ile
        275
                            280
                                                 285
Ser Gln Ile Ser Glu Thr Leu Phe Ile Leu Thr Ile Pro Phe Phe Leu
                        295
                                             300
   290
Ser Arg Tyr Gly Ile Lys Asn Val Met Leu Ile Ser Ile Ala Ala Trp
                    310
                                        315
Met Leu Arg Phe Gly Leu Phe Ala Tyr Gly Asp Pro Ser Ala Phe Gly
                325
                                    330
Thr Val Leu Leu Val Leu Ser Met Ile Val Tyr Gly Cys Ala Phe Asp
            340
                                345
Phe Phe Asn Ile Ser Gly Ser Val Phe Val Glu Lys Glu Val Lys Pro
                            360
                                                 365
Glu Ile Arg Ala Ser Ala Gln Gly Met Phe Leu Met Met Thr Asn Gly
                        375
                                             380 .
Phe Gly Cys Ile Leu Gly Gly Val Val Ser Gly Lys Val Val Glu Met
                    390
                                        395
Tyr Thr Thr Asn Gly Ile Thr Asp Trp Gln Pro Val Trp Leu Ile Phe
                405
                                    410
Ala Gly Tyr Ser Leu Val Leu Phe Phe Ala Phe Ile Ala Leu Phe Lys
                                425
Tyr Lys His Val Arg Val Pro Asn Gly Ala Gln Pro Ile Ala His
```

<210> 9880

<211> 276

<212> PRT

<213> Enterobacter cloacae

<400> 9880

```
Glu Leu Ile Asp Val Leu Ile Val Glu Asp Glu Asn Glu Leu Ala Gln
                        55
Leu His Ala Glu Leu Ile Gly Lys His Pro Arg Leu Arg Leu Val Gly
                    70
                                        75
Ile Ala Ala Ser Leu Ala Asp Ala Gln Val Gln Leu Glu Ser Lys Gln
               85
                                    90
Pro Lys Leu Met Leu Leu Asp Asn Tyr Leu Pro Asp Gly Lys Gly Ile
                                105
Thr Leu Ile Ser Asn Pro Met Leu Thr Arg Ala Asn Cys Ser Val Ile
                            120
Phe Ile Thr Ala Ala Ser Asp Met Asp Thr Cys Ser Gln Ala Ile Arg
                        135
Asn Gly Ala Phe Asp Tyr Ile Leu Lys Pro Val Ser Trp Lys Arg Leu
                    150
                                        155
Ser Gln Ser Leu Glu Arg Phe Val Gln Phe Ala Glu Gln Gln Arg Val
                165
                                    170
Trp Lys Ile Val Asp Gln Gln Asn Val Asp Ser Leu Tyr Gln Leu Gln
            180
                                185
                                                    190
Ala Lys Asn Tyr Arg Leu Asp Asn Gly Ser Lys Gly Ile Glu Asn
                            200
                                                205
Thr Leu Ala Arg Val Gln Met Leu Phe Asn Asn Lys Ala Ala His Cys
                        215
                                            220
Phe Thr Val Asp Glu Val Val Ser Glu Thr Gly Leu Ser Lys Thr Thr
                    230
                                        235
Thr Arg Arg Tyr Leu Glu His Cys Val Glu Val Gly Phe Leu Thr Val
                245
                                    250
Glu Met Leu Tyr Gly Lys Ile Gly His Pro Arg Arg Met Tyr Arg Arg
                                265
Ser Ala Thr
       275
<210> 9881
<211> 132
<212> PRT
<213> Enterobacter cloacae
<400> 9881
Cys Arg Pro Phe Ala Ala Pro Gly Ala Val Ser Glu Gly Ser Ala Val
                                    10
Asn Gln Gln Glu Gly Gly Met Ser Ala Gln Pro Val Asp Leu Gln Ile
            20
Phe Gly Arg Ser Leu Arg Val Asn Cys Pro Pro Glu Gln Arg Asp Ala
        35
                            40
Leu Asn Gln Ala Ala Asp Asp Leu Asn Gln Arg Leu Gln Asp Leu Lys
                        55
Glu Arg Thr Arg Val Thr Asn Thr Glu Gln Leu Val Phe Ile Ala Ala
                    70
Leu Asn Ile Ser Tyr Glu Leu Thr Gln Glu Lys Ala Lys Thr Arg Asp
                85
                                    90
Tyr Ala Ala Ser Met Glu Gln Arg Ile Lys Met Leu Gln Gln Thr Ile
                                105
Glu Gln Ala Leu Leu Asp Gln Gly Arg Ser Pro Glu Arg Pro Gly Pro
       115
                            120
Lys Phe Glu
   130
<210> 9882
<211> 231
<212> PRT
<213> Enterobacter cloacae
```

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<400> 9882
Asn Tyr Asp Asp Thr Phe Thr Leu Asn Gln Gly Phe Lys Gly Tyr Ser
                                    10
Leu Arg Arg His Leu Gly Asp Ser Leu Ser Phe Leu Leu Pro Thr Thr
            20
                                25
Met Thr Gln Phe Pro Glu Val Ser Ala Ser Arg Gln Asp Ile Arg Gln
                            40
                                                45
Leu Ile Arg Gln Arg Arg Ala Leu Ser Ala Glu Gln Gln Ala His
                        55
Phe Ala Gln Gln Ala Ala Ala Arg Met Met Ala Tyr Pro Pro Val Val
                    70
                                        75
Met Ala Asn Thr Val Ala Leu Phe Leu Ser Phe Asp Gly Glu Leu Asp
                                    90
Thr Gln Pro Leu Ile Asp Gln Leu Trp Arg Ala Gly Lys Lys Val Tyr
                                105
Leu Pro Val Leu His Pro Phe Ser Arg Gly Asn Leu Leu Phe Leu His
                            120
Tyr His Pro His Ser Glu Leu Val Val Asn Arg Leu Lys Ile Thr Glu
                        135
Pro Lys Leu Asp Val Arg Asp Val Leu Pro Leu Ser Glu Leu Asp Val
                    150
                                        155
Leu Ile Thr Pro Leu Val Ala Phe Asp Glu Gln Gly Gln Arg Leu Gly
                                    170
               165
Met Gly Gly Phe Tyr Asp Arg Thr Leu Gln Asn Trp Gln Gln Tyr
            180
                                185
Gly Leu Gln Pro Val Gly Tyr Ala His Asp Cys Gln Gly Val Glu Val
                            200
                                                205
Leu Pro Val Glu Lys Trp Asp Val Pro Leu Pro Ala Val Val Thr Pro
                        215
                                            220
Ser Lys Thr Trp Thr Trp
<210> 9883
<211> 347
<212> PRT
```

<213> Enterobacter cloacae

## <400> 9883

Phe Gln Gln Pro Arg His Gln Arg Gly Val Asn Thr Leu Val Asp Lys 10 Gln Pro Arg Pro Gly Asp Thr Arg Leu Pro Arg Arg Ala Glu Asn Ala Val Ala Asp Pro Ala Arg Gly Leu Phe Asp Ile Gly Ile Leu Gln His 40 Asp Gly Arg Arg Phe Ala Ala Gln Phe Gln Arg Gly Arg Asp Gln Phe Phe Arg Arg His Val Arg Gln Met Thr Ala Arg Gly Gly Ala Ala Gly Lys Gly Asn Phe Pro His Ala Arg Met Thr Arg Gln Arg Ile Ala Asn 90 His Arg Ala Phe Ala Arg Gln Asp Thr Gln Gln Pro Gly Gly Gln Pro 100 105 Gly Leu Phe Lys Asn Pro Arg Gln Leu Gln Arg His Gln Arg Arg Gly 120 125 Phe Gly Gly Leu Glu Asp His Arg Val Pro Gly Gly Asn Arg Arg Cys 135 140 Asp Leu Leu His Phe Ala Gly Asn Arg Arg Val Pro Arg Arg Asp Gly 150 155 Arg His His Ala Lys Gly Leu Val Ala Ala Gln Arg Gln Gln Ile Arg 170 165 Leu Ala Arg Arg Lys Phe Pro Phe Gln Gln Leu Ala Gly Gly Gly

180 185 Lys Val Ala Arg Arg Ser Arg Arg Ala His His Gln Pro Ala Arg Phe 200 205 Arq Gln Arg Leu Ala Val Ile Thr Ala Leu His Leu Arg Gln Arg Ile 215 220 Asp Ala Gly Phe Asn Lys Ile Gly Asn Phe Met Gln Asp Leu Arg Ala 230 235 His Val Arg Gln Thr Val Thr Pro Cys Gly Ile Ala Pro Gly Ala Leu 245 250 Ser Gly Gly Tyr Arg Leu Leu Gln Val Ile Gln Thr Gly Gly Ile Gln 265 Arg Arg Val Glu Arg Pro Val Cys Arg Lys Val Ala Leu His Arg Val 280 Ala Ala Ala Ser Pro Leu Ala Ala Asp Lys Asn Leu Gln Ile Val 295 300 His Arg His Ser Ser Ala Gln Gly Gln Leu Ala Ala Gly Ala His Arg 310 315 Ala Gln Cys Arg Gln Gly Gly Phe Arg Ile Arg Ser Gln Arg Gln 325 330 Ser Ala Gln Phe Gln Met Glu Leu Ala Glu 340 <210> 9884 <211> 386 <212> PRT <213> Enterobacter cloacae <400> 9884 Asn Met Ala Lys His Leu Phe Thr Ser Glu Ser Val Ser Glu Gly His 10 Pro Asp Lys Ile Ala Asp Gln Ile Ser Asp Ala Val Leu Asp Ala Ile 25 Leu Ala Gln Asp Pro Lys Ala Arg Val Ala Cys Glu Thr Tyr Val Lys 40 Thr Gly Met Val Leu Val Gly Gly Glu Ile Thr Thr Ser Ala Trp Val 55 Asp Ile Glu Glu Ile Thr Arg Asn Thr Val Arg Glu Ile Gly Tyr Val 70 75 His Ser Asp Met Gly Phe Asp Ala Asn Ser Cys Ala Val Leu Ser Ala Ile Gly Lys Gln Ser Pro Asp Ile Asn Gln Gly Val Asp Arg Ala Asp 105 Pro Leu Glu Gln Gly Ala Gly Asp Gln Gly Leu Met Phe Gly Tyr Ala 120 Thr Asn Glu Thr Asp Val Leu Met Pro Ala Pro Val Thr Tyr Ala His 135 140 Arg Leu Val Gln Arg Gln Ala Glu Val Arg Lys Asn Gly Thr Leu Pro 150 155 Trp Leu Arg Pro Asp Ala Lys Ser Gln Val Thr Phe Gln Tyr Asp Asp 165 170 Gly Lys Ile Val Gly Ile Asp Ala Val Val Leu Ser Thr Gln His Ala 180 185 Glu Glu Ile Asp Gln Lys Ser Leu Gln Glu Ala Val Met Glu Glu Ile 200 205 Ile Lys Pro Val Leu Pro Thr Glu Trp Leu Ser Ser Ala Thr Lys Phe 215 220 Phe Ile Asn Pro Thr Gly Arg Phe Val Ile Gly Gly Pro Met Gly Asp 230 235 Cys Gly Leu Thr Gly Arg Lys Ile Ile Val Asp Thr Tyr Gly Gly Met

250

Ala Arg His Gly Gly Gly Ala Phe Ser Gly Lys Asp Pro Ser Lys Val

```
270
            260
                                265
Asp Arg Ser Ala Ala Tyr Ala Ala Arg Tyr Val Ala Lys Asn Ile Val
                           280
                                                285
Ala Ala Gly Leu Ala Asp Arg Cys Glu Ile Gln Val Ser Tyr Ala Ile
                       295
                                            300
Gly Val Ala Glu Pro Thr Ser Ile Met Val Glu Thr Phe Gly Thr Glu
                    310
                                        315
Lys Val Pro Ser Glu Gln Leu Thr Leu Leu Val Arg Glu Phe Phe Asp
                                    330
Leu Arg Pro Tyr Gly Leu Ile Gln Met Leu Asp Leu Leu His Pro Ile
                                345
Tyr Gln Glu Thr Ala Ala Tyr Gly His Phe Gly Arg Glu His Phe Pro
                            360
Trp Glu Lys Thr Asp Lys Ala Ala Leu Leu Arg Asp Ala Ala Gly Leu
                        375
Lys
385
<210> 9885
<211> 190
<212> PRT
<213> Enterobacter cloacae
<400> 9885
Ala His Thr Thr Asp Pro Pro Ala Gly Gly Ala Ser Cys Ala Ser Pro
Leu Pro Ala Leu Cys Ser Ala Pro Met Lys Ala Pro Arg Leu Pro Ile
            20
                                25
Ala Ile Gln Gln Ala Val Met Arg Ser Leu Arg Glu Lys Leu Ala Gln
        35
                            40
Ala Asn Leu Lys Leu Gly Arg Asn Tyr Pro Glu Pro Lys Leu Val Tyr
                        55
Gln Gln Arg Gly Thr Ala Ala Gly Thr Ala Trp Leu Glu Ser Tyr Glu
                    70
                                        75
Ile Arg Leu Asn Pro Val Leu Met Glu Asn Gln Gln Ala Phe Ile
                85
                                    90
Glu Glu Val Val Pro His Glu Leu Ala His Leu Leu Val Trp Lys His
            100
                                105
                                                     110
Phe Gly Arg Val Ala Pro His Gly Lys Glu Trp Lys Trp Met Met Glu
                            120
                                                125
Ala Val Leu Gly Val Pro Ala Arg Arg Thr His Gln Phe Glu Leu Glu
                        135
Ser Val Arg Arg Asn Thr Phe Pro Tyr Arg Cys Gln Cys Gln Gln His
                                        155
                    150
Gln Leu Thr Val Arg Arg His Asn Arg Val Val Arg Gly Glu Ala Thr
                                    170
Tyr Arg Cys Val Lys Cys Gly Glu Pro Leu Val Ala Glu
            180
<210> 9886
<211> 236
<212> PRT
<213> Enterobacter cloacae
<400> 9886
Asn Arg Ser Gly Ile Pro Asp Leu Asp His Arg Asn Ala Asp Gly Arg
                                    10
Tyr Arg Lys Thr Phe Thr Glu Ile Thr Cys Asp Ser Ala Cys Val Tyr
                                                     30
                                25
Pro His Thr Gly Arg Cys Arg Phe Leu Asn Gln Glu Thr Val Pro Leu
```

```
Thr Met Asn Leu Gln His His Phe Leu Ile Ala Met Pro Ala Leu Gln
                        55
Asp Pro Ile Phe Arg Arg Ala Val Val Tyr Ile Cys Glu Tyr Asn Glu
                    70
                                        75
Asp Gly Ala Met Gly Ile Ile Ile Asn Lys Pro Leu Glu Asn Leu Gln
                                    90
                85
Val Glu Gly Ile Leu Asp Lys Leu Lys Ile Pro Ala Glu Ala Arg Leu
            100
                                105
Pro Glu Ile Arg Leu Asp Lys Pro Val Met Leu Gly Gly Pro Leu Ala
                            120
                                                125
Glu Asp Arg Gly Phe Ile Leu His Thr Pro Pro Val Phe Ser Ser Ser
                        135
Ile Arg Ile Ser Asp Asn Thr Val Val Thr Thr Ser Arg Asp Val Leu
                    150
                                        155
Glu Thr Leu Gly Thr Ala Ser Gln Pro Ser Glu Val Leu Val Ala Leu
                                    170
Gly Tyr Ala Ser Trp Glu Lys Gly Gln Leu Glu Gln Glu Ile Leu Asp
            180
                                185
Asn Ala Trp Leu Thr Ala Pro Ala Asp Met Asn Ile Leu Phe Lys Thr
        195
                            200
                                                205
Pro Ile Ala Asp Arg Trp Arg Asp Ala Ala Lys Leu Ile Gly Ile Asp
                        215
                                            220
Ile Leu Thr Met Pro Gly Val Ala Gly His Ala
                    230
<210> 9887
<211> 127
<212> PRT
<213> Enterobacter cloacae
<400> 9887
Leu Ser Ala Thr Ala Ile Ser Arg Ala Gly Gly Ser Arg Gly Ala Pro
                                    10
Val Thr Ala Ile Thr Cys Arg Cys Asn Gly Leu Ala Ser Ala Arg Gln
            20
Arg Gly Met Ser Met Ala Arg Thr Ile Phe Cys Thr Phe Leu Gln Arg
Asp Ala Glu Gly Gln Asp Phe Gln Leu Tyr Pro Gly Asp Leu Gly Lys
                        55
Arg Ile Tyr Asn Glu Ile Ser Lys Glu Ala Trp Gly Gln Trp Gln Lys
                                        75
Lys Gln Thr Met Leu Ile Asn Glu Lys Lys Leu Ser Met Asn Pro
                                    90
Glu His Arg Lys Leu Leu Glu Gln Glu Met Val Asn Phe Leu Phe Glu
            100
                                105
Gly Lys Asp Val His Ile Glu Gly Tyr Thr Pro Pro Glu Lys
        115
                            120
<210> 9888
<211> 463
<212> PRT
<213> Enterobacter cloacae
<400> 9888
Thr His Lys Ile Thr Lys Gly Leu Ile Met Ser Thr Thr Asp Asp Ser
```

Phe Ser Val Thr His Asp Pro Ile Asp Ile Gln Arg Pro Ser Leu Lys

Glu Arg Trp Trp His Ile Met Asp Thr Trp Lys Ile Gly Ile Ile Pro

Leu Pro Leu Phe Val Leu Ala Gly Ala Leu Ile Ala Ile Asp Cys Leu

```
55
Gly Gly Lys Leu Pro Ser Asp Ile Val Val Met Val Ala Thr Leu Ala
                   70
                                        75
Phe Phe Gly Phe Ala Cys Gly Glu Phe Gly Lys Arg Leu Pro Ile Val
               85
                                    90
Gly Lys Leu Gly Ala Ala Ala Ile Cys Ala Thr Phe Ile Pro Ser Ala
                                105
Leu Val Tyr Tyr Gly Leu Leu Pro Asp Val Val Glu Ser Thr Thr
                            120
Lys Phe Tyr Lys Ser Thr Asn Ile Leu Tyr Leu Tyr Ile Cys Cys Ile
                        135
                                            140
Ile Val Gly Ser Ile Met Ser Met Asn Arg Thr Val Leu Ile Gln Gly
                    150
                                        155
Phe Leu Arg Ile Phe Pro Met Leu Cys Gly Glu Ile Val Gly Met
                165
                                    170
Ile Val Gly Met Gly Val Gly Leu Ala Leu Gly Leu Glu Pro Phe Gln
            180
                                185
Ile Phe Phe Ile Ile Leu Pro Ile Met Ala Gly Gly Val Gly Glu
                            200
                                                205
Gly Ala Ile Pro Leu Ser Ile Gly Tyr Ala Thr Leu Leu His Met Asp
                        215
                                            220
Gln Gly Val Ala Leu Gly Arg Val Leu Pro Met Val Met Leu Gly Gly
                    230
                                        235
Leu Thr Ala Ile Ile Ile Ser Gly Cys Leu Asn Gln Leu Gly Lys Arg
                                    250
                245
Tyr Pro His Leu Thr Gly Glu Gly Gln Leu Met Pro Asn Arg Ala Asn
            260
                                265
                                                    270
Ala Asp Ala Thr Val Ser Gln Pro Ala Phe Ser Gly Lys Ala Asp Val
        275
                            280
                                                285
Thr Thr Ile Ala Ser Gly Ala Leu Leu Ala Val Leu Leu Tyr Met Leu
                        295
                                            300
Gly Met Leu Gly His Lys Leu Ile Gly Leu Pro Ala Pro Val Gly Met
                    310
                                        315
Leu Phe Met Ala Val Leu Val Lys Leu Cys Asn Gly Ala Ser Pro Arg
                                    330
Leu Leu Glu Gly Ser Gln Val Val Tyr Lys Phe Phe Gln Thr Ser Val
            340
                                345
Thr Tyr Pro Ile Leu Phe Ala Val Gly Val Ala Ile Thr Pro Trp His
                            360
Glu Leu Val Ala Ala Phe Thr Leu Thr Asn Leu Leu Val Ile Ile Ser
                        375
Thr Val Ser Ala Leu Val Ala Thr Gly Phe Phe Val Gly Lys Lys Ile
                    390
                                        395
Gly Met His Pro Ile Asp Val Ala Ile Val Ser Cys Cys Gln Ser Gly
                                    410
Gln Gly Gly Thr Gly Asp Val Ala Ile Leu Thr Ala Gly Asn Arg Met
                                425
Ser Leu Met Pro Phe Ala Gln Ile Ala Thr Arg Ile Gly Gly Ala Ile
                            440
                                                445
Asn Val Ser Ile Ser Leu Leu Ile Leu Gly Asn Phe Leu Val
                        455
<210> 9889
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<211> 344

<212> PRT

<213> Enterobacter cloacae

<400> 9889

Gly Gly Ser Met Gln Ser Gln Pro Ile Asp Phe Arg His Thr Val Val 10 Ala Lys His Pro Glu Arg Leu Ser Gln Ile Arg Tyr Leu Leu Ala Asp

```
25
            20
Ser Gly Leu Gly Leu Asp Asn Asp Ile Thr Leu Phe Val Glu Ala Trp
                            40
Ser Gly Ala Gln Leu Val Gly Cys Ala Gly Leu Ala Ala Asn Val Ile
                        55
Lys Cys Val Ala Val Asn Glu Gln Leu Arg Gly Glu Asn Leu Ser Ala
                    70
                                        75
Arg Leu Leu Ala Glu Val Glu Asn Ala Ala Leu Glu Arg Gly His Phe
                                    90
His Leu Phe Leu Cys Thr Arg Pro Cys Asn Lys Glu Arg Phe Gly Arg
                                105
Ser Gly Phe Trp Pro Ile Ala Gln Ser Gly Asn Asn Ala Val Leu Met
                            120
Glu Asn Thr Pro Gln Gly Ile Ala Arg Tyr Cys Arg Thr Leu Ser Arg
                        135
                                            140
Met Arg Arg Gly Gly Glu Lys Ile Gly Ala Ile Val Met Asn Ala Asn
                    150
                                        155
Pro Phe Thr Leu Gly His Arg His Leu Val Glu Gln Ala Ala Gln
                165
                                    170
Cys Asp Ala Leu His Leu Phe Val Val Arg Glu Asp Ala Ser Phe Phe
                                185
            180
Pro Phe Ser Ala Arg Leu Glu Met Val Arg Ala Gly Val Ala His Leu
                            200
Pro Asn Val Val His Glu Gly Ser Gln Tyr Ile Ile Ser Arg Ala
                        215
                                            220
Thr Phe Pro Ala Tyr Phe Leu Lys Glu Thr Gly Lys Val Gln Gln Ala
                    230
                                        235
Trp Ser Glu Ile Asp Val Leu Ile Phe Arg Asp Phe Ile Ala Pro Ala
                                    250
                245
Leu Gly Ile Thr His Arg Phe Ile Gly Ser Glu Pro Phe Cys Asp Ile
                                265
                                                    270
            260
Thr Arg Gln Tyr Asn Gln Thr Leu His Asp Leu Leu Ala Ser His Ile
                            280
Asp Val Val Glu Met Pro Arg Ile Lys Ala Thr Gly Asn Ala Ile Ser
                        295
                                            300
Ala Ser Glu Val Arg Arg Leu Leu Lys Thr Gln Gln Phe Ser Arg Ile
                    310
                                        315
Arg Glu Ile Val Pro Asp Ser Thr Phe Ala His Leu Glu Ala His Tyr
                                    330
Arg Ala Ser Ala Glu Val Ala
            340
```

<210> 9890

<211> 301

<212> PRT

<213> Enterobacter cloacae

<400> 9890

```
105
            100
Glu Leu Glu Gly His Leu Glu Arg Ile Glu Gln Ala Cys Gly Arg Glu
                           120
                                                125
Val Gly Ser Thr Arg Val Met Ala Ala Ile Glu Ser Ala Ile Gly Val
                       135
                                            140
Ile Asn Ala Val Ala Ile Ala Arg Ser Ser Pro Arg Leu Ile Gly Ile
                   150
                                        155
Ala Leu Ala Ala Phe Asp Tyr Val Met Asp Met Gln Thr Glu Arg Gly
                                    170
Asp Gly Thr Glu Leu Phe Tyr Ala Arg Cys Ala Val Leu His Ala Ala
                                185
Arg Ala Ala Gly Ile Asp Ala Phe Asp Val Val Trp Ser Asp Val Asn
                            200
Asp Glu Ala Gly Phe Leu Arg Glu Val Asp Leu Ile Arg Lys Met Gly
                        215
                                            220
Phe Asn Gly Lys Ser Leu Ile Asn Pro Arg Gln Ile Asp Leu Leu His
                    230
                                        235
Asn Ala Tyr Ala Pro Thr Arg Glu Glu Val Glu His Ala Lys Arg Val
                245
                                    250
Ile Glu Ala Ala Glu Glu Gly Glu Arg Asn Gly Leu Gly Val Val Ser
                                265
            260
Leu Asn Gly Lys Met Val Asp Ala Pro Ile Ile Asn His Ala Gln Val
       275
                            280
Val Leu Glu Arg Ala Ala Ser Gly Val Arg Arg
<210> 9891
<211> 207
<212> PRT
<213> Enterobacter cloacae
<400> 9891
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Val His Arg Gln Asn Arg Arg Gly Asp Pro Leu Pro Arg Arg Gln Arg 10 Asp Arg His Cys Ala Thr Gly Glu Gly Gly Ser Met Thr Leu Ala Thr 20 Pro Val Arg Ala Gly Val Ser Leu Glu Glu Leu Leu Ala Ala Lys Glu Arg Arg Ala Ala Arg Gln Ala Asp Trp Leu Thr His Tyr Gln Gln Pro 55 Val Ile Ser Leu Thr Leu Val Thr Pro Gly Glu Ile Lys Asp Ser Leu 70 75 Arg Tyr Arg Asn Thr Met Gly Val Ala Leu Gln Met Cys Asp Gln Leu 90 Leu Trp Glu Asn Arg Trp Gln Val Leu Asp Arg Leu Val Leu Trp Leu 105 Pro Thr Gly Pro Glu Ala Leu Trp Cys Val Ala His Pro Ala Ala Glu 120 Ile Lys Ala His Cys Ala Glu Leu Glu Gln Thr His Pro Leu Gly Arg 135 140 Leu Trp Asp Leu Asp Val Ile Cys Pro Glu Asn Gly Leu Val Gly Arg 150 155 Gln Ser Leu Gly Ser His Leu Arg Arg Cys Leu Ile Cys Asp Glu Pro 170 165 Ala His Ala Cys Ser Arg Ser Arg His His Pro Val Glu Gln Val Val 185 Ser Arg Val Glu Lys Met Ile Asp Asp Trp Phe Ala Arg Asp 200

<210> 9892 <211> 257

<212> PRT <213> Enterobacter cloacae

<400> 9892 Leu Trp Ile Met Pro Val Ser Arg Thr Phe Ser Gln Ala Asp Asn Ser 10 Phe Met Lys Asn Asp Val Ile Ser Pro Glu Phe Asp Glu Asn Gly Arg 20 25 Pro Leu Arg Arg Ile Arg Ser Phe Val Arg Arg Gln Gly Arg Leu Thr 40 Lys Gly Gln Gln His Ala Leu Asp Asn Tyr Trp Pro Val Met Gly Val 55 Glu Phe Ser Glu Gln Pro Leu Asp Phe Thr Asp Leu Phe Gly Arg Asp 75 Ala Pro Val Thr Leu Glu Ile Gly Phe Gly Met Gly Thr Ser Leu Val 85 90 Thr Met Ala Lys Ala Arg Pro Glu Gln Asn Phe Leu Gly Ile Glu Val 105 100 His Ser Pro Gly Val Gly Ala Cys Leu Ala Thr Ala His Glu Gly 120 Val Glu Asn Leu Arg Val Met Cys His Asp Ala Val Glu Val Leu His 135 140 Lys Met Ile Pro Asp Asn Ser Leu Asn Met Val Gln Leu Phe Pro 150 155 Asp Pro Trp His Lys Ala Arg His Asn Lys Arg Arg Ile Val Gln Ala 165 170 Pro Phe Ala Glu Leu Val Lys Ser Lys Leu Lys Leu Gly Gly Val Phe 185 190 180 His Met Ala Thr Asp Trp Glu Pro Tyr Ala Glu His Met Leu Glu Val 200 205 Met Ser Ser Leu Asp Gly Tyr Lys Asn Gln Ser Glu Ser Asn Asp Tyr 215 220 Val Pro Arg Pro Asp Ser Arg Pro Val Thr Lys Phe Glu Gln Arg Gly 230 235 His Arg Leu Gly His Gly Val Trp Asp Leu Met Phe Glu Arg Val Lys 245 250

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<210> 9893
```

## <400> 9893

<sup>&</sup>lt;211> 666

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

Leu Val Tyr Pro Ile Lys Val Asn Gln His Arg Arg Val Ile Glu Ser 135 Leu Ile His Ser Gly Glu Pro Leu Gly Leu Glu Ala Gly Ser Lys Ala 150 155 Glu Leu Met Ala Val Leu Ala His Ala Gly Met Thr Arg Ser Val Ile 165 170 Val Cys Asn Gly Tyr Lys Asp Arg Glu Tyr Ile Arg Leu Ala Leu Ile 180 185 Gly Glu Lys Met Gly His Lys Val Tyr Leu Val Ile Glu Lys Met Thr 200 205 Glu Ile Ala Ile Val Leu Glu Glu Ala Glu Arg Leu Asn Val Ile Pro 215 220 Arg Leu Gly Val Arg Ala Arg Leu Ala Ser Gln Gly Ser Gly Lys Trp 230 235 Gln Ser Ser Gly Gly Glu Lys Ser Lys Phe Gly Leu Ala Ala Asn Gln 245 250 Val Leu Gln Leu Val Glu Ile Leu Arg Glu Arg Gly Arg Leu Asp Ser 265 Ile Gln Leu Leu His Phe His Leu Gly Ser Gln Met Ala Asn Ile Arg 280 Asp Ile Ala Thr Gly Val Arg Glu Ser Ala Arg Phe Tyr Val Glu Leu 295 His Lys Leu Gly Val Asn Ile Gln Cys Phe Asp Val Gly Gly Leu 315 310 Gly Val Asp Tyr Glu Gly Thr Arg Ser Gln Ser Asp Cys Ser Val Asn 325 330 Tyr Gly Leu Asn Glu Tyr Ala Asn Asn Ile Ile Trp Ala Ile Gly Asp 345 340 Ala Cys Glu Glu His Gly Leu Pro His Pro Thr Val Ile Thr Glu Ser 360 Gly Arg Ala Val Thr Ala His His Thr Val Leu Val Ser Asn Ile Ile 370 375 380 Gly Val Glu Arg Ser Glu Ile Thr Glu Ala Thr Pro Pro Ala Asp Asp 390 395 Ala Pro Arg Ser Leu Gln Ser Met Trp Glu Thr Trp Gln Glu Met His 405 410 Glu Pro Gly Thr Arg Arg Ser Leu Arg Glu Trp Leu His Asp Ser Gln 420 425 430 Met Asp Leu His Asp Ile His Val Gly Tyr Ser Ser Gly Thr Phe Ser 435 440 Leu Gln Glu Arg Ala Trp Ala Glu Gln Leu Tyr Leu Asn Met Cys His 455 460 Glu Val Gln Lys Gln Leu Asp Pro Ser Asn Arg Ala His Arg Pro Ile 470 475 Ile Asp Glu Leu Gln Glu Arg Met Ala Asp Lys Met Tyr Val Asn Phe 485 490 Ser Leu Phe Gln Ser Met Pro Asp Ala Trp Gly Ile Asp Gln Leu Phe 500 505 Pro Val Leu Pro Leu Glu Gly Leu Asn His Ala Pro Glu Arg Arg Ala 520 Val Leu Leu Asp Ile Thr Cys Asp Ser Asp Gly Ala Ile Asp His Tyr 535 Val Asp Gly Asp Gly Ile Ala Thr Thr Met Pro Met Pro Glu Tyr Asp 550 555 Pro Glu Asn Pro Pro Met Leu Gly Phe Phe Met Val Gly Ala Tyr Gln 565 570 Glu Ile Leu Gly Asn Met His Asn Leu Phe Gly Asp Thr Glu Ala Val 585 590 Asp Val Phe Val Phe Pro Asp Gly Ser Val Glu Val Glu Leu Ser Asp 600 Glu Gly Asp Thr Val Ala Asp Met Leu Glu Tyr Val Gln Leu Asp Pro

```
610
                        615
                                            620
Lys Lys Leu Thr Gln Phe Arg Asp Gln Val Lys Asn Thr Gly Leu
                   630
                                    635
Asp Asp Ala Leu Gln Gln Gln Phe Leu Glu Glu Phe Glu Ala Gly Leu
               645
                                    650
Tyr Gly Tyr Thr Tyr Leu Glu Asp Glu
            660
<210> 9894
<211> 146
<212> PRT
<213> Enterobacter cloacae
<400> 9894
Ser Ile Asn Lys Phe Val Thr Leu Ser Leu Asp Glu Thr Phe Ile Ala
Phe Ile Leu Thr Val Leu Asn Lys Lys Gln Ser Phe Ile Tyr Glu Thr
                                25
Lys Ala Trp Arg Ile Val Met Ser Trp Ile Gly Val Cys Asp Ala Glu
Gln Val Gln Glu Asp Phe Pro Phe Ser Gly Asn Val Asp Gly Lys Glu
                        55
Ile Gly Val Tyr Leu Ile Asp Gly Glu Tyr Tyr Ala Leu Glu Asp Val
                    70
                                        75
Cys Pro His Ala Tyr Ala Leu Leu Ser Gln Gly Phe Val Glu Asp Gly
                85
                                    90
Lys Val Glu Cys Pro Leu His Glu Ala Val Phe Asp Val Lys Thr Gly
                                105
            100
                                                    110
Gln Cys Leu His Gly Pro Gly Gly Arg Asn Leu Asn Arg Tyr Pro Val
                            120
                                                125
Arg Val Phe Glu Asn Gln Ile Gln Ile Thr Phe Val Glu Glu Thr Val
                        135
Ala
145
<210> 9895
<211> 372
<212> PRT
<213> Enterobacter cloacae
<400> 9895
Thr Arg Cys Ala Cys Thr Thr Ser Arg Ala Ser Arg Gly Ala Thr Pro
                                    10
Ala Ser Gly His Ser Tyr Arg Leu Thr Ala Thr Glu Gly Asn Ala Met
            20
Thr Thr Thr Val Gln His Tyr Leu Asp Lys Gly Leu Arg Gly Leu Trp
Tyr Pro Val Leu Ala Ser Trp Glu Val Gln Ser Ala Pro Val Gly Ile
Thr Arg Leu Gly Glu Gln Ile Val Val Trp Arg Asn Lys Asp Gly Gln
                                        75
Val Gln Ala Leu Glu Asp Arg Cys Pro His Arg Gly Ala Arg Leu Ser
Met Gly Trp Asn Leu Gly Asp Arg Ile Ala Cys Trp Tyr His Gly Val
                                105
Glu Val Ala Gly Asn Gly Glu Val Lys Asp Val Pro Ala Val Asp Lys
                            120
                                                125
Cys Pro Leu Val Gly Gln Gln Cys Val Arg Ser Tyr Ser Val Gln Glu
                        135
                                            140
Ala His Gly Ala Ile Phe Leu Trp Phe Gly Val Thr Ala Asp Gln Gln
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Pro Asp Glu Leu Thr Phe Pro Asp Glu Leu Ala Asp Thr Asp Ser Phe
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Ser Asn Phe Leu Cys Thr Ala Ala Trp Lys Cys Asn Tyr Gln Tyr Ala
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Leu Glu Asn Val Met Asp Pro Met His Gly Thr Tyr Leu His Ser Ser
                            200
                                                205
Ser His Ser Met Ala Glu Gly Asp Arg Lys Ala Asp Met Val Leu Gln
                        215
                                            220
Pro Thr Lys Thr Gly Phe Ile Phe Glu Lys Lys Gly Gln Ser Gly Val
                    230
                                        235
Asn Phe Asp Trp Val Glu Leu Gly Asn Ser Gly Thr Cys Trp Met Arg
                245
                                    250
Leu Ser Ile Pro Tyr Lys Lys Arg Phe Gly Pro Gly Gly His Phe Phe
                                265
Ile Val Gly Met Val Val Pro Glu Asp Asn Asp Asn Cys Arg Val Phe
                            280
Phe Trp Arg Ile Arg Arg Val Gln Gly Trp Gln Arg Asp Met Trp Arg
                        295
                                             300
Phe Met Tyr Arg Asn Arg Leu Glu Lys Leu His Trp Glu Val Leu Glu
                    310
                                        315
Gln Asp Arg Val Val Leu Glu Ser Leu Ala Pro Asn Ala Arg Asp His
                                    330
                325
Glu Tyr Leu Tyr Gln His Asp Val Gly Leu Ser Arg Leu Arg Arg Met
                                345
            340
Met Gln Lys Ala Ala Lys Glu Gln Leu Ala Met Arg Glu Ala Gln Gln
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                            360
                                                365
Gly Ala Ala
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<210> 9896
<211> 184
<212> PRT
<213> Enterobacter cloacae
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Asp Val Thr Glu Glu Ser Val Met Thr Asp Ser Ile Val Thr Asn Lys
                                    10
Thr Gly Ile Lys Pro Asp His Leu Thr Met Glu Glu Trp Val Glu Ser
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Arg Ile Ala Arg Phe Glu Gly Arg Lys Tyr Asp Trp Asn Ala Leu Lys
Phe Gln Ala Asp Phe Asp Pro Lys Tyr Arg Arg Ala Gln Met Arg Tyr
Ile Gly Thr Gly Ala Thr Gly Val Ala Asn Asp Thr Asn Thr Val Gln
                    70
                                        75
Ala Asp His Phe Thr Phe Ser Thr Met Val Leu Pro Ser Lys Cys Glu
                                    90
Gly Pro Leu His Leu His Asp Asp Val Glu Glu Val Phe Phe Met Leu
Lys Gly Gln Ile Thr Leu Met Ile Gln Asp Gly Asp Asn Tyr Thr Glu
                            120
Thr Val Leu Arg Glu Arg Asp Leu Ile Ser Val Pro Pro Gly Ile Tyr
                        135
                                            140
Arg Gly Leu Phe Asn His Gly Glu Glu Ala Leu Met Cys Val Met
                    150
                                        155
Leu Gly Thr Asn Lys Pro Glu Ile Pro Thr Tyr Pro Ser Asp His Pro
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                                    170
Leu Ser Lys Val Lys Arg Asn
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<211> 260
<212> PRT
<213> Enterobacter cloacae
<400> 9897
Gly Gly Met Met Thr Gly Phe Arg Glu Gln Gly Ser Gly Ile Pro Leu
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Met Leu Leu His Gly Ile Ser Ser Gly Ala Ala Ser Trp His Lys Gln
                                25
Met Ala Leu Asn Gly Phe Arg Val Leu Ala Trp Asp Met Pro Gly Tyr
                            40
Gly Glu Ser Pro Met Leu Ala Val Ala Arg Ala Asn Ala Gly Asp Tyr
Ala Asp Ala Leu Ala Ala Met Leu Asp Arg Ala Gly Val Trp Gln Ala
                                        75
Val Leu Val Gly His Ser Leu Gly Ala Leu Val Ala Ser Ala Phe Ala
                85
Ala Lys Phe Pro Asp Arg Val Ile His Leu Val Leu Ala Asp Ala Ala
                                105
            100
Gln Gly Tyr Gly Asn Ala Ala Pro Glu Gln Arg Glu Gln Val Trp Arg
                            120
        115
Asn Arg Glu Gln Gln Met Ala Leu Gly Gly Glu Ile Leu Ala Gln Thr
                        135
                                            140
Arg Ala Pro Lys Leu Leu Arg Pro Gly Ala Arg Ala Glu Asp Ile Ala
                    150
                                         155
Thr Val Ala Ala Gly Met Arg Val Leu Arg Pro Glu Gly Tyr Leu Ala
                165
                                    170
Ala Ser Trp Met Leu Ala His Asp Asp Ile His Gly Trp Leu Lys Arg
            180
                                185
Tyr Ser Gly Ser Phe Glu Val Trp Cys Gly Glu Gln Asp Ala Ile Thr
        195
                            200
                                                 205
Gln Pro Glu Leu Val Gln Gly Leu Ala Leu Arg Tyr Gly Met Pro Phe
                        215
                                             220
Ile Ala Ile Pro Gln Ala Gly His Ala Ser Tyr Leu Asp Asn Asp Ala
                                         235
                    230
Phe Phe Asn Gln Gln Leu Leu Arg Ile Asn Glu Glu Val Arg Asp Glu
                245
                                    250
Cys Thr Asn
            260
<210> 9898
<211> 395
<212> PRT
<213> Enterobacter cloacae
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Glu Ser Thr Arg Gly Phe Thr Met Ser Val Ile Lys Met Thr Asp Leu
Asp Leu Ala Gly Lys Arg Val Phe Ile Arg Ala Asp Leu Asn Val Pro
Val Lys Asp Gly Lys Val Thr Ser Asp Ala Arg Ile Arg Ala Ser Leu
Pro Thr Ile Glu Leu Ala Leu Lys Gln Gly Ala Lys Val Met Val Thr
Ser His Leu Gly Arg Pro Thr Glu Gly Glu Tyr Asn Glu Glu Phe Ser
Leu Leu Pro Val Val Asn Tyr Leu Lys Asp Lys Leu Ser Ser Pro Val
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Arg Leu Val Lys Asp Tyr Leu Asp Gly Val Glu Val Ala Glu Gly Glu 100 105 110 Leu Val Val Leu Glu Asn Val Arg Phe Asn Lys Gly Glu Lys Lys Asp

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120
       115
                                                125
Asp Glu Thr Leu Ser Lys Lys Tyr Ala Ala Leu Cys Asp Val Phe Val
                      135
                                           140
Met Asp Ala Phe Gly Thr Ala His Arg Ala Gln Ala Ser Thr His Gly
                  150
                                       155
Ile Gly Lys Phe Ala Asp Val Ala Cys Ala Gly Pro Leu Leu Ala Asp
               165
                                   170
Glu Leu Glu Ala Leu Gly Lys Ala Leu Lys Glu Pro Ala Arg Pro Met
                               185
Val Ala Ile Val Gly Gly Ser Lys Val Ser Thr Lys Leu Thr Val Leu
                            200
Asp Ser Leu Ser Lys Ile Ala Asp Gln Leu Ile Val Gly Gly Ile
                        215
Ala Asn Thr Phe Val Ala Ala Gln Gly His Asn Val Gly Lys Ser Leu
                    230
                                        235
Tyr Glu Ala Asp Leu Val Asp Glu Ala Lys Arg Leu Leu Gly Thr Cys
                245
                                    250
Asp Ile Pro Val Pro Thr Asp Val Arg Val Ala Thr Glu Phe Ser Glu
                                265
            260
Thr Ala Thr Ala Thr Leu Lys Ser Val Asn Asp Ile Lys Asp Glu Glu
                            280
                                                285
Gln Ile Leu Asp Leu Gly Asp Val Ser Ala Gln Lys Leu Ala Glu Ile
                        295
                                            300
Leu Lys Asn Ala Lys Thr Ile Leu Trp Asn Gly Pro Val Gly Val Phe
                                        315
                    310
Glu Phe Pro Asn Phe Arg Lys Gly Thr Glu Ile Val Ala Asn Ala Ile
                325
                                    330
Ala Asp Ser Glu Ala Phe Ser Ile Ala Gly Gly Gly Asp Thr Leu Ala
            340
                                345
Ala Ile Asp Leu Phe Gly Ile Ala Asp Lys Ile Ser Tyr Ile Ser Thr
        355
                            360
                                                365
Gly Gly Gly Ala Phe Leu Glu Phe Val Glu Gly Lys Val Leu Pro Ala
                                            380
    370
                        375
Val Ala Met Leu Glu Glu Arg Ala Lys Lys
                    390
<210> 9899
<211> 285
<212> PRT
<213> Enterobacter cloacae
<400> 9899
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Met Glu Gln Leu Asp Val Val Asp Ser Ile Asn Asn Ala Gly Asn Trp 10 Leu Val Arg Asn Gln Ala Leu Leu Ser Tyr Ala Val Asn Ile Val Ala Ile Ala Ile Ile Ile Val Gly Met Ile Val Ala Arg Ile Val Ser Asn Ala Val Asn Arg Val Met Val Ala Arg His Ile Asp Ala Thr Val Ala Asp Phe Leu Ser Ala Leu Val Arg Tyr Gly Ile Ile Ala Phe 70 75 Thr Leu Ile Ala Ala Leu Gly Arg Val Gly Val Gln Thr Ala Ser Val 90 Ile Ala Val Leu Gly Ala Ala Gly Leu Ala Ile Gly Leu Ala Leu Gln 100 105 110 Gly Ser Leu Ser Asn Leu Ala Ala Gly Val Leu Leu Val Thr Phe Arg 120 125 Pro Phe Arg Ser Gly Glu Tyr Val Asp Leu Gly Gly Ile Ala Gly Thr 135 140 Val Leu Gln Val Gln Ile Phe Ser Thr Thr Leu Arg Thr Val Asp Gly

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5424
                   150
                                       155
Arg Ile Val Val Pro Asn Gly Lys Ile Ile Ala Gly Asn Ile Ile
                           170
               165
Asn Phe Ser Arg Glu Pro Val Arg Arg Asn Glu Leu Ile Ile Ser Val
                               185
           180
Ala Tyr Asp Ser Asp Ile Asp Gln Val Lys Ser Leu Ile Thr Asn Ile
                           200
Ile Ala Ser Asp Asp Arg Ile Leu Lys Asp Arg Glu Gln Thr Val Arg
                       215
                                           220
Leu Asn Glu Leu Gly Ala Ser Ser Ile Asn Phe Val Val Arg Ile Trp
                   230
                                       235
Ser Lys Ser Ser Asp Leu Gln Asn Val Tyr Trp Asp Val Leu Glu Arg
                                   250
Ile Lys Arg Asp Phe Asp Ala Asn Gly Ile Ser Phe Pro Tyr Pro Gln
                               265
Met Asp Val Asn Val Lys Lys Val Lys Glu Ala Glu
                            280
<210> 9900
<211> 261
<212> PRT
<213> Enterobacter cloacae
<400> 9900
Ala Leu Leu Thr Gly His Ser Ser Gln His Gly Gly Met Thr Val Lys
                                    10
Phe Lys Val Met Ala Leu Ala Ala Leu Val Ser Leu Gly Ala Val Ser
           20
                                25
Val Gln Ala Asn Glu Leu Pro Asn Gly Pro His Ile Val Thr Ser Gly
                            40
Thr Ala Ser Val Asp Ala Val Pro Asp Val Ala Thr Leu Ala Ile Glu
                       55
Val Asn Val Ala Ala Lys Asp Ala Ala Ser Ala Lys Lys Gln Ala Asp
                   70
                                       75
Asp Arg Val Ala Gln Tyr Leu Ser Phe Leu Glu Gln Asn Gly Val Ala
               85
                                    90
Lys Lys Asp Ile Ser Ser Ala Asn Leu Arg Thr Gln Pro Asp Tyr Asp
           100
                                105
                                                    110
Tyr Gln Asn Gly Lys Ser Ile Leu Lys Gly Tyr Arg Ala Val Arg Thr
                            120
Val Glu Val Thr Val Arg Gln Leu Asp Lys Leu Asn Gly Leu Leu Asp
                        135
                                            140
Gly Ala Leu Lys Ala Gly Leu Asn Glu Ile Arg Ser Val Ser Leu Gly
                   150
                                        155
Val Ala Gln Pro Glu Lys Tyr Lys Asp Glu Ala Arg Lys Ala Ala Ile
               165
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170 Asp Asp Ala Ile His Gln Ala Gln Gln Leu Ala Ser Gly Phe Lys Ser 185 Lys Leu Gly Pro Val Tyr Ser Val Arg Tyr His Val Ser Asn Tyr Gln 200 195 Pro Ser Pro Met Val Arg Met Met Lys Ala Asp Ala Ara Pro Val Ser 215 220 Ala Gln Glu Thr Tyr Glu Gln Pro Thr Ile Gln Phe Asp Asp Gln Val 230 235 Asp Val Val Phe Gln Leu Glu Pro Thr Gln Thr Gln Gln Thr Glu Ala 250 245

Ala Lys Ala Gln

260

<210> 9901

<211> 128

<212> PRT <213> Enterobacter cloacae <400> 9901 Arg Met Arg Met Ser Ile Gln Asn Glu Met Pro Gly Tyr Lys Asp Leu 10 Asn Gln Leu Leu Asn Gln Gln Gly Val Gly Leu Thr Pro Ala Glu Met 20 25 His Gly Leu Ile Ser Gly Ile Leu Cys Gly Gly Asn Ser Asp Ser Ser 40 Trp Gln Pro Leu Ile His Asp Leu Thr Asn Glu Arg Leu Ala Phe Gly 55 His Glu Leu Ala Glu Ala Leu Arg Lys Met His Ala Ala Thr Ser Asp Ser Leu Glu Asp Asp Gly Phe Leu Phe Gln Leu Tyr Leu Pro Glu Gly 90 Asp Asp Val Ser Val Phe Asp Arg Ala Asp Ala Leu Ala Gly Trp Val 100 105 Asn His Tyr Leu Leu Gly Leu Gly Val Thr Gln Pro Lys Leu Glu 120 <210> 9902 <211> 200 <212> PRT <213> Enterobacter cloacae <400> 9902 Ser Ser Gly Thr Leu Ser Pro Arg Arg Trp Ala Ser Leu Thr Ala Ser 10 Ser Ala Arg Ser Arg Ser Ala Ile Ser Pro Ala Ser Thr Thr Arg Arg 20 Cys Thr Thr Cys Trp Pro Arg Ile Leu Thr Trp Trp Arg Cys Arg Ala 40 Ser Arg Pro Pro Ala Thr Pro Phe Arg Pro Arg Lys Cys Ala Val Tyr 55 60 Ser Arg His Ser Ser Phe Pro Gly Ser Gly Arg Leu Ser Arg Thr Pro 75 70 Pro Ser Arg Thr Ser Lys His Ile Ile Val Arg Val Arg Lys Ser His 85 90 Asn Tyr Gln Glu Phe Ile Met Asn Ile Val Arg Glu Ala Leu Ala Gly 100 105 Thr Gln Glu Ser Ser Asp Leu Met Val Lys Ile Ala Pro Ala His Gly 120 Glu Leu Glu Ile Val Ile His Ser Glu Val Ile Lys Gln Phe Gly Glu 135 Gln Ile Arg Gln Val Val Asn Asp Thr Leu Arg Ala Met Asn Val His 150 Gln Gly Leu Ile Ile Ile Glu Asp Lys Gly Ala Leu Asp Cys Val Ile 170 Arg Ala Arg Leu Gln Ser Ala Leu Leu Arg Ala Ala Asn Glu Gln Ala 180 185 Ile Asn Trp Gly Ala Leu Lys <210> 9903 <211> 556 <212> PRT <213> Enterobacter cloacae <400> 9903

Leu Arg Arg Gln Lys Arg Ala Ser Val Thr Ala Trp Ala Trp Cys Arg

10 Ser Thr Ala Lys Trp Trp Met His Arg Leu Leu Thr Thr Arg Arg Trp 25 Cys Trp Ser Ala Arg Arg Pro Pro Ala Cys Val Gly Lys Asp Asp Ile 45 40 Met Asn Gln Thr Glu Leu Leu His Met Asn Phe Pro His Leu Arg Asp 55 60 Leu Lys Pro Phe Asp Thr Ala His Ser Ala Thr Pro Trp Leu Ala Asp 70 75 Ser Glu Ala Lys His Ser Arg Lys Leu Cys Ala Ser Ile Glu Glu Ala 85 90 Val Lys Arg Cys Gly Leu Gln Asp Gly Met Thr Ile Ser Phe His His 100 105 Ala Phe Arg Glu Gly Asp Arg Val Ile Asn Thr Val Val Ala Leu Leu 120 Ala Arg Met Gly Phe Lys Asn Leu Thr Leu Ala Ser Ser Ser Leu Met 135 Thr Cys Asn Asp Ala Leu Ile Glu His Ile Glu Ser Gly Val Ile Thr 150 155 Arg Ile Tyr Thr Ser Gly Met Arg Gly Arg Leu Ala Asp Ala Ile Ser 165 170 His Gly Leu Met Glu Glu Pro Val Gln Ile His Ser His Gly Gly Arg 180 185 Val Lys Leu Leu Gln Asp Gly Glu Leu Asn Ile Asp Val Ala Phe Leu 200 205 195 Gly Val Pro Cys Ser Asp Glu Phe Gly Asn Ala Asn Gly Thr His Gly 215 220 Lys Ser Cys Cys Gly Ser Leu Gly Tyr Ala Met Val Asp Ala Gln Phe 230 235 Ala Arg Lys Val Val Leu Leu Thr Glu Ala Leu Val Pro Phe Pro Asn 245 250 Met Pro Ala Ser Leu Val Gln Asp Gln Val Asp Tyr Ile Val Gln Val 260 265 Glu Ser Val Gly Asp Pro Ala Lys Ile Ser Val Gly Ala Ala Arg Val 280 Thr Ser Asn Pro Arg Glu Leu Met Ile Ala Arg Tyr Ala Ala Asp Val 295 300 Ile Glu His Ser Gly Tyr Phe Lys Pro Gly Phe Ser Met Gln Thr Gly 310 315 Ser Gly Ala Ala Thr Ala Cys Thr Arg Phe Met Glu Glu Lys Met 325 330 Glu Arg Ser Gly Val Lys Ala Arg Phe Ala Leu Gly Gly Ile Thr Gly 340 345 Ser Leu Val Asp Leu His Glu Lys Gly Leu Ile Glu Lys Leu Leu Asp 360 365 Thr Gln Cys Phe Asp Gly Gln Ala Ala Ala Ser Leu Ala Arg Asn Pro 375 380 Asn His Val Glu Ile Ser Thr Asn Val Tyr Ala Asn Pro Gly Ser Lys 390 395 Ala Ala Ser Cys Asp Gln Leu Asp Val Val Ile Leu Ser Ala Leu Glu 405 410 Ile Asp Val Asp Phe Asn Val Asn Val Ile Thr Gly Ser Asp Gly Val 420 425 Met Arg Gly Ala Ser Gly Gly His Cys Asp Val Ala Ala Ala Asn 440 Leu Thr Ile Val Val Ala Pro Leu Leu Arg Ser Arg Ile Pro Thr Val 455 460 Val Lys Arg Val Thr Thr Arg Leu Thr Pro Gly Glu Ser Ile Asp Val 470 475 Leu Val Thr Asp His Gly Ile Ala Val Asn Pro Ala Arg Pro Glu Ile 490

Arg Glu Arg Leu Met Glu Ala Gly Met Lys Val Val Asp Ile Asn Ala 500 505 Leu Tyr Glu Arg Ala Ile Ser Leu Thr Gly Val Pro Lys Pro Ile Glu 515 520 525 Phe Thr Asp Lys Ile Val Gly Val Ile Arg Tyr Arg Asp Gly Ser Val 535 540 Ile Asp Thr Val Arg Gln Val Lys Glu Glu Val 550 <210> 9904 <211> 269 <212> PRT <213> Enterobacter cloacae <400> 9904 Ser Met Thr Gly Leu Leu Ala Thr Lys Pro Arg Pro Val Asp Val Pro 10 Ala Leu Ala Glu Ala Ala Leu Trp Gln Glu Leu Glu Leu Thr Pro Lys 20 25 Pro Gly Leu Val Asp Arg Leu Asn Asn Gly Ser His Arg Asp Met Asp 35 45 His Ala Leu Phe Val Arg Ser Ile Met Ala Ile Thr Pro Trp Phe Ala 55 Arg Phe Ala Glu Leu Gly Glu Ala His Ala Ala Lys Pro Ala Asp Arg 7.5 70 Gln Leu Arg Ile Leu Arg Pro Met Gly Met Ala Cys Glu Gln Ala Met 90 Tyr Ala Ala Thr Gly Gly Val Asn Thr His Lys Gly Gly Ile Phe Ala 105 100 Leu Gly Leu Leu Cys Phe Ala Ala Gly Arg Val Lys Asn Ile Ser Ala 115 120 Asp Ser Leu Cys Cys Glu Val Ser His Ile Cys Arg Gly Leu Val Ala 135 140 Arg Glu Leu Ala Gly Arg Ser Gly Gln Ala Thr Ala Gly Glu Arg Gln 150 155 Phe Gln His Tyr Gly Leu Thr Gly Ala Arg Gly Glu Ala Glu Ser Gly 165 170 Phe Ala Thr Val Arg Lys Ala Leu Gly Gln Trp Asn Gly Gln Leu Leu 180 185 190 His Asp Leu Leu Leu Arg Leu Met Ala Val Asn Gln Asp Ser Asn Leu 200 Val Ser Arg Gly Gly Ile Gln Gly Leu Arg Tyr Val Gln Gly Tyr Ala 215 Arg Glu Leu Leu Ala Asn Cys Trp Asp Arg Glu Ala Leu Leu Lys Met 230 235 Asp Lys Ala Leu Ile Glu Arg Asn Leu Ser Pro Gly Gly Ser Ala Asp 250 Leu Leu Ser Val Gly Trp Val Leu Ser Ala Ile Lys <210> 9905 <211> 328 <212> PRT <213> Enterobacter cloacae <400> 9905 Ser Met Asp Val Glu Glu Ile Val Ala Leu Ser Val Lys His Asn Val 10 Ser Asp Leu His Leu Cys Ser Asp Ser Pro Pro Arg Trp Arg Arg Ser 25

Gly Arg Leu Glu Pro Ala Pro Phe Pro Pro Pro Asp Val Glu Ala Leu

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40
Leu Lys Ala Trp Leu Asn Asp Glu Gln Gln Gly Ala Trp Trp Ala Asn
                       55
                                            60
Gly Gln Val Asp Phe Ala Val Thr Leu Ala Asp Arg Gln Arg Leu Arg
                   70
                                       75
Gly Ser Ala Phe Lys His Met His Gly Val Ser Ile Ala Leu Arg Leu
               85
                                    90
Leu Pro Leu Thr Cys Pro Gln Leu Ser Ala Leu Gly Val Pro Arg Ala
                                105
Ile Pro Glu Leu Leu Ser Asn Asp Asn Gly Leu Ile Leu Val Thr Gly
                           120
Ala Thr Gly Ser Gly Lys Ser Thr Thr Leu Ala Ala Met Val Asp Phe
                       135
Leu Asn His Gln Thr Asp Gly His Ile Leu Thr Leu Glu Asp Pro Val
                    150
                                        155
Glu Phe Met Tyr Gln Ser Glu Arg Cys Leu Ile Gln Gln Arg Glu Ile
               165
                                    170
Gly Leu His Ser Pro Ser Phe Ala Glu Ala Leu Arg Ser Ala Leu Arg
            180
                               185
Glu Asp Pro Asp Val Ile Leu Leu Gly Glu Leu Arg Asp Ser Glu Thr
                            200
                                                205
Ile Arg Leu Ala Leu Thr Ala Ala Glu Thr Gly His Leu Val Leu Ala
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                        215
                                            220
Thr Leu His Thr Arg Gly Ala Ala Gln Ala Ile Glu Arg Leu Val Asp
    .
                    230
                                        235
Thr Phe Pro Ala Gln Glu Lys Asp Pro Val Arg Asn Gln Leu Ala Gly
                                    250
               245
Ser Leu Arg Ala Val Leu Ala Gln Lys Leu Arg Gln Asp Val Gln Gly
            260
                                265
Gly Arg Val Ala Leu Tyr Glu Leu Leu Val Asn Thr Ser Ala Ala Ala
                           280
Asn Leu Ile Arg Glu Gly Lys Thr Trp Gln Leu Pro Gly Ile Ile Gln
                        295
                                            300
Thr Gly Gln Gln Ala Gly Met Gln Asn Phe Glu Gln Ser Leu Ala Glu
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                                        315
Arg Arg Ala Gln Gly Arg Leu
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<210> 9906
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<sup>&</sup>lt;211> 81

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<sup>&</sup>lt;400> 9906

Phe
 Tyr
 Gln
 Gly
 Leu
 Gln
 Asp
 Phe
 Asp
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 Gly
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 Leu
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 Val
 Asn

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 Ile
 Asn
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 Thr
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 Ile
 Leu
 Gly
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<sup>&</sup>lt;210> 9907

<sup>&</sup>lt;211> 73

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<400> 9907 Thr Arg Ala Leu Leu Ile Gln Glu Phe Ser Arg Gly Phe Ala Glu 10 Pro Cys His Thr Glu Phe Gly Tyr Val Phe Tyr Asn Asp Met Asn Lys 25 Lys Pro Val Ala Arg Ser Gly Phe Gln His Thr Leu Leu Gly Asn Gly 40 Ala Val Asn Gly Leu Leu Ser Pro Tyr Asn Ala Ala Ile Val Val Asn Cys Phe Thr Leu Asn Thr Lys Ser <210> 9908 <211> 409 <212> PRT <213> Enterobacter cloacae <400> 9908 Pro Arg His Ala Pro Ser Ala Glu Lys Ala Gly Gly Met Thr Ser Arg Ile Val Ile Ile Gly Gly Gly Gln Ser Gly Gly Trp Ala Ala Lys 20 Thr Leu Arg Asp Glu Gly Phe Asp Gly Glu Ile Cys Val Val Ala Glu 40 Glu Glu Trp Asp Phe Tyr Glu Arg Pro Pro Leu Ser Lys Ala Ser Leu Leu Glu Pro Asp Ala Ala Leu Pro Arg Leu Phe Thr Asp Glu Val Gln Gln Ala Leu Asn Leu Thr Trp Tyr Arg Pro Leu Arg Ala Glu Ser Val 90 Asp Arg Val Glu Lys Lys Val Leu Leu Ser Asn Gly Glu Gln Leu Ser 100 105 Tyr Asn Ile Leu Leu Ile Ala Thr Gly Gly Arg Ala Arg Leu Pro Ser 120 Gln Ala Trp Ala Ser His Pro Gln Val Tyr Thr Leu Arg His Trp Gln . 135 Asp Ala Gln Arg Leu Lys Ser Arg Leu Ser Glu Ser His Lys Leu Ala 150 155 Ile Ile Gly Gly Gly Trp Ile Gly Leu Glu Ile Ala Ala Ser Ala Arg 165 170 Lys Ser Gly Val Ala Val Thr Leu Phe Glu Gln Gln Pro Ala Leu Cys 180 185 Met Arg Ser Val Ser Gly Glu Val Ser Gln Arg Leu Glu Ala Ile His 200 Arg Glu Gln Gly Val Glu Ile Arg Thr Gly Cys Gly Ala Leu Glu Leu 215 Glu Asp Asp Gly Gly Leu Pro Val Val His Cys Asp Gly Asn Arg Glu 230 235 Thr Phe Asp Ala Val Val Gly Ile Gly Val Asp Leu Asn Leu Glu 250 Leu Ala Arg Asp Ala Gly Leu Lys Thr Gly Arg Gly Ile Val Val Asp 260 265 Ala Gln Gly Arg Thr Ser Asp Pro Phe Ile Phe Ala Ala Gly Asp Val 275 280 Ala Gln His His Tyr Gly Leu Cys Ile Gln Ser Trp Ala Phe Ala 295 300 Gln Asn Gln Ala Val Ala Thr Ala Lys Ala Met Leu Asn Pro Asp Ala 310 315

Pro Gly Tyr Asp Asp Ala Pro Trp Leu Trp Ser Asp Gln Tyr Gln His

330

<210> 9909 <211> 329

<212> PRT

<213> Enterobacter cloacae

<400> 9909

Ser Val Ile Pro Ala Val Leu Lys Ser Gly Ala Ala Ser Arg Met Pro 10 Ser Pro Ser Arg Ser Trp Phe Arg Val Trp Arg Cys Ala Thr Ala Cys 20 Arg Leu Ser Pro Phe Arg Arg Pro Gly Thr Pro Ala Ile Ser Ile Thr Thr Arg Phe Ser Thr Asn Ser Phe Tyr Ala Leu Thr Lys Arg Cys Ala 55 Met Asn Ala Gln Ile Asp Gly Arg Val Ala Val Val Thr Gly Gly Ser 70 75 Ser Gly Ile Gly Phe Glu Thr Leu Arg Leu Leu Leu Gly Glu Gly Ala 90 Lys Val Ala Phe Cys Gly Arg Asp Glu Asp Arg Leu Ala Ser Ala His 100 105 Ala Thr Leu Gln Asn Glu Phe Pro His Gly Glu Ile Phe Ala Phe Arg 115 120 Cys Asp Val Leu Asn Ala Asp Glu Val Gln Ala Phe Ala Asp Ala Val 135 140 Gln Ala Arg Phe Gly Ala Ala Asp Met Leu Ile Asn Asn Ala Gly Gln 150 155 Gly Tyr Val Ala His Phe His Asp Thr Pro Arg Glu Ala Trp Leu His 165 170 Glu Ala Glu Leu Lys Leu Phe Gly Val Ile Asn Pro Val Gln Ala Phe 180 185 Gln Pro Leu Leu Glu Arg Ser Asp Ile Ala Ser Ile Thr Cys Val Asn 200 205 Ser Leu Leu Ala Leu Gln Pro Glu Glu His Met Ile Ala Thr Ser Ala 215 220 Ala Arg Ala Ala Leu Leu Asn Met Thr Leu Thr Leu Ser Lys Glu Leu 230 235 Val Gly Lys Gly Ile Arg Val Asn Ser Ile Leu Leu Gly Met Val Glu 250 Ser Gly Gln Trp Gln Arg Arg Phe Glu Ser Arg Ala Asp Lys Ser Gln 265 Ser Trp Pro Glu Trp Thr Ala Glu Ile Ala Arg Lys Arg Gly Ile Pro 280 285 Met Ala Arg Leu Gly Lys Pro Gln Glu Pro Ala Gln Ala Leu Leu Phe 295 300 Leu Ala Ser Pro Leu Ala Ser Phe Thr Thr Gly Ala Ala Leu Asp Val 310 315 Ser Gly Gly Phe Cys Arg His Leu

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<211> 260
<212> PRT
<213> Enterobacter cloacae
<400> 9910
Gly His Ile Met Lys Lys Val Met Leu Ile Gly Leu Gly Ala Met Ala
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Gln Ala Val Ile Glu Arg Leu Pro Ala Gly Val Ala Ile Gly Trp Ile
                                25
Val Ala Arg Ala Ser His His Pro Ala Ile His Asp Gln Phe Gly Asp
Ala Val Glu Ala Leu Thr Ser Pro Met Ala Cys Ala Gln Thr Pro Asp
Leu Val Leu Glu Cys Ala Ser Gln Glu Ala Val Ala Gln Tyr Gly Glu
                                        75
Glu Ile Leu Arg Arg Gly Trp His Leu Ala Ile Ile Ser Thr Gly Ala
                                    90
Leu Ala Asp Ser Ala Leu Glu Gln Arg Leu Leu Ala Ala Gly Gly Lys
                                105
Leu Thr Leu Leu Ser Gly Ala Val Ala Gly Ile Asp Gly Leu Ala Ala
                            120
                                                125
Ala Lys Glu Gly Gly Leu Glu Arg Val Thr Tyr Gln Ser Arg Lys Ser
                        135
Pro Ala Ser Trp Arg Gly Ser Tyr Ala Glu Gln Leu Ile Asp Leu Asn
                    150
                                        155
Ala Val Ser Glu Ala Lys Val Phe Phe Glu Gly Ser Ala Arg Glu Ala
                165
                                    170
Ala Arg Leu Phe Pro Ala Asn Ala Asn Val Ala Ala Thr Val Ala Leu
                                185
Gly Gly Val Gly Met Glu Asp Thr Arg Val Gln Leu Met Val Asp Pro
                            200
                                                 205
Ala Thr Lys Arg Asn Thr His Thr Leu His Val Glu Gly Leu Phe Gly
                        215
                                            220
Glu Phe His Leu Glu Leu Ser Gly Leu Pro Leu Ala Ser Asn Pro Lys
                    230
                                        235
Thr Ser Thr Leu Ala Ala Leu Ser Ala Val Arg Ala Cys Arg Glu Leu
                245
                                    250
Ala Leu Ser
            260
<210> 9911
<211> 493
<212> PRT
<213> Enterobacter cloacae
<400> 9911
Gly Val Thr Met Asp Asp Leu Lys Ile Phe Ile Gly Gly Gln Trp Arg
Arg Gly Gly Asn Pro Met Gln Ser His Phe Pro Ala Asp Gly Ser
Leu Asn Ala Thr Leu Asn Ala Ala Ser Leu Asp Asp Leu Glu Glu Ala
Val Ala Ala Gly Glu Arg Ala Trp Arg Asp Pro Ala Trp Arg Asn Ser
Leu Pro His Met Arg Ala Lys Ile Leu His Lys Val Ala Asp Leu Ile
                                        75
Glu Ser Arg Val Asp Ala Leu Ala Gln Met Gln Ser Arg Asp Asn Gly
                                    90
Lys Pro Leu Ala Glu Ala Arg Gly Leu Val Met Ser Ala Ala Gly Thr
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100 105 110 Ala Arg Tyr Phe Ala Ala Ala Cys Glu Leu Leu Glu Gly Glu Leu Pro

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115
                            120
                                                 125
Thr Pro Arg Gln Pro Asp Leu Leu Thr Leu Ser Cys Tyr Glu Pro Leu
                       135
                                           140
Gly Val Val Ala Ala Ile Thr Pro Trp Asn Ser Pro Ile Ala Ser Glu
                   150
                                       155
Met Gln Lys Val Ala Pro Ala Ile Ala Ala Gly Asn Ala Val Ile Leu
                                   170
                165
Lys Pro Ala Glu Ala Thr Pro Leu Met Ala Leu Glu Leu Ala Arg Ile
            180
                                185
                                                    190
Phe Lys Gln Ala Gly Leu Pro Ala Gly Leu Leu Ser Val Leu Pro Gly
                            200
                                                 205
Lys Gly Ser Val Ile Gly Asp Ala Leu Ala Arg His Pro Arg Val Arg
                        215
                                            220
Lys Ile Ser Phe Thr Gly Gly Thr Thr Thr Gly Arg His Leu Ala His
                    230
                                        235
Val Ala Ala Glu Lys Leu Ile Pro Ala Ser Leu Glu Leu Gly Gly Lys
                                    250
                245
Ser Pro Thr Ile Val Leu Glu Asp Ala Asp Ile Glu Gln Ala Ala Arg
                                265
Gly Ile Cys Tyr Gly Ile Phe Ser Ser Ala Gly Gln Ala Cys Ile Ala
        275
                            280
Gly Ser Arg Leu Phe Ile His Glu Ser Ile Tyr Ala Pro Leu Met Ala
                        295
                                            300
Arg Leu Leu Glu Leu Thr Arg Gly Leu Arg Val Gly His Pro Phe Thr
                    310
                                        315
Asp Gly Val His Val Gly Pro Leu Ile Asn Glu Lys His Arg Gln Ser
                325
                                    330
Val Ile Gln Tyr Val Glu Leu Ala Lys Arg Glu Gly Gly Arg Val Leu
                                345
                                                     350
            340
Cys Gly Gly Glu Ile Pro Ala Asp Pro Ala Leu Val Asn Gly Ser Phe
        355
                            360
Phe Leu Pro Thr Ile Ile Glu Gly Leu Ser Asn Ser Ala Arg Ala Cys
                        375
                                            380
Gln Glu Glu Ile Phe Gly Pro Val Leu Val Ala Met Pro Phe Gly Asp
                    390
                                        395
Glu Ala Thr Leu Ile His Glu Ala Asn Asp Ser Val Tyr Gly Leu Ala
                405
                                    410
Ala Gly Ile Trp Thr Arg Asp Thr Gly Arg Ala Leu Arg Leu Ser Glu
            420
                                425
                                                     430
Gln Leu Glu Ala Gly Thr Val Trp Ile Asn Thr Tyr Lys Val Phe Ala
                            440
Ile Ser Thr Pro Phe Gly Gly Phe Lys Glu Ser Gly Leu Gly Arg Glu
                        455
                                            460
Lys Gly Ile Gln Gly Leu Lys Ala Trp Met Gln Gln Lys Ser Ile Tyr
                    470
                                                             480
Leu Ala Thr Gly Asn Ser Val Asn His Trp Cys Asp
                485
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<210> 9912

<211> 728

<212> PRT

<213> Enterobacter cloacae

<400> 9912

Gly Ile Ser Thr Gly Ala Gly Glu Gln Ile Ala Gln His Ala Ser Met 1 5 10 15 Ile Gln Arg Phe Leu Lys Gln Gln Lys Asn Ala Pro Cys Thr Cys Pro 20 25 30 Ala Ala Trp Val Thr Leu Leu Ala Leu Phe Ser Gly Val Ala Gln Asn 35 40 45 Ala Leu Ser Ser Arg Ala Trp Pro Leu Thr Val Arg Ser Gly Val Lys

55 Met Ser Ser Arg Lys Glu Leu Ala Asn Ala Ile Arg Ala Leu Ser Met 70 75 Asp Ala Val Gln Lys Ala Lys Ser Gly His Pro Gly Ala Pro Met Gly 90 85 Met Ala Asp Ile Ala Glu Val Leu Trp Arg Asp Phe Leu Asn His Asn 100 105 Pro Gln Asn Pro Ala Trp Ala Asp Arg Asp Arg Phe Val Leu Ser Asn 120 125 Gly His Gly Ser Met Leu Ile Tyr Ser Leu Leu His Leu Thr Gly Tyr 135 140 Asp Leu Pro Ile Glu Glu Leu Lys Asn Phe Arg Gln Leu His Ser Lys 155 150 Thr Pro Gly His Pro Glu Val Gly Tyr Thr Ala Gly Val Glu Thr Thr 170 Thr Gly Pro Leu Gly Gln Gly Ile Ala Asn Ala Val Gly Met Ala Ile 185 Ala Glu Lys Thr Leu Ala Ala Gln Phe Asn Arg Pro Gly His Asp Ile 200 205 Val Asp His Phe Thr Tyr Ala Phe Leu Gly Asp Gly Cys Met Met Glu 215 220 Gly Ile Ser His Glu Val Cys Ser Leu Ala Gly Thr Leu Lys Leu Gly 230 235 Lys Leu Val Ala Phe Tyr Asp Asp Asn Gly Ile Ser Ile Asp Gly His 250 245 Val Glu Gly Trp Phe Thr Asp Asp Thr Ala Ala Arg Phe Glu Ala Tyr 260 265 Gly Trp His Val Val Arg Gly Val Asp Gly His Asp Ala Asp Ser Ile 275 280 Lys Arg Ala Val Glu Glu Ala Arg Ala Val Thr Asp Lys Pro Ser Leu 295 300 Leu Met Cys Lys Thr Ile Ile Gly Phe Gly Ser Pro Asn Lys Ala Gly 310 315 Thr His Asp Ser His Gly Ala Pro Leu Gly Asp Ala Glu Ile Ala Leu 330 325 Thr Arg Glu Ala Leu Gly Trp Lys His Pro Ala Phe Glu Ile Pro Ser 345 340 Glu Ile Tyr Ala Gln Trp Asp Ala Lys Glu Val Gly Gln Ala Lys Glu 355 360 Ala Ala Trp Asn Glu Lys Phe Ala Ala Tyr Ala Lys Ala Phe Pro Gln 375 380 Glu Ala Ala Glu Phe Thr Arg Arg Met Lys Gly Asp Met Pro Ser Asp 390 395 Phe Asp Ala Lys Ala Asn Glu Phe Ile Ala Lys Leu Gln Ala Asn Pro 405 . 410 Ala Lys Ile Ala Ser Arg Lys Ala Ser Gln Asn Ala Ile Glu Ala Phe 425 Gly Pro Leu Leu Pro Glu Phe Leu Gly Gly Ser Ala Asp Leu Ala Pro 440 Ser Asn Leu Thr Leu Trp Ser Gly Ser Lys Pro Ile Asn Glu Asp Thr 455 460 Ala Gly Asn Tyr Ile His Tyr Gly Val Arg Glu Phe Gly Met Thr Ala 470 475 Ile Ala Asn Gly Ile Ala Leu His Gly Gly Phe Leu Pro Tyr Thr Ser 485 490 Thr Phe Leu Met Phe Val Glu Tyr Ala Arg Asn Ala Val Arg Met Ala 505 Ala Leu Met Lys Gln Arg Gln Val Met Val Tyr Thr His Asp Ser Ile 520 525 Gly Leu Gly Glu Asp Gly Pro Thr His Gln Pro Val Glu Gln Val Ala 535

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Ser Leu Arg Val Thr Pro Asn Met Ser Thr Trp Arg Pro Cys Asp Gln
                   550
                                        555
Val Glu Ser Ala Val Ala Trp Lys Tyr Gly Val Glu Arg Gln Asp Gly
                                    570
                565
Pro Thr Ala Leu Ile Leu Ser Arg Gln Asn Leu Ala Gln Gln Glu Arg
            580
                                585
Thr Pro Glu Gln Leu Ala Asn Ile Ala Arg Gly Gly Tyr Val Leu Lys
                            600
                                                605
Asp Cys Ala Gly Gln Pro Glu Leu Ile Phe Ile Ala Thr Gly Ser Glu
                        615
                                            620
Val Glu Leu Ala Val Ala Ala Trp Glu Lys Leu Thr Ala Glu Gly Val
                    630
                                        635
Lys Ala Arg Val Val Ser Met Pro Ser Thr Asp Ala Phe Asp Lys Gln
                645
                                    650
Asp Ala Ala Tyr Arg Glu Ser Val Leu Pro Lys Ala Val Ser Ala Arg
                                665
Val Ala Val Glu Ala Gly Ile Ala Asp Tyr Trp Phe Lys Tyr Val Gly
                            680
Leu Asn Gly Ala Ile Val Gly Met Thr Thr Phe Gly Glu Ser Ala Pro
                        695
                                            700
Ala Glu Gln Leu Phe Glu Glu Phe Gly Phe Thr Val Glu Asn Val Val
                    710
Ala Lys Ala Lys Glu Leu Leu
                725
<210> 9913
<211> 236
<212> PRT
<213> Enterobacter cloacae
<400> 9913
Tyr Tyr Pro Phe Pro Leu Met Thr Phe Pro Gln Tyr Ser Leu Pro Pro
                                    10
Gly Gln Leu Cys Glu Asn Tyr Val Met Leu Ser Tyr Tyr Phe Gln Gly
            20
                                25
Leu Val Leu Gly Ala Ala Met Ile Leu Pro Leu Gly Pro Gln Asn Ala
Phe Val Met Asn Gln Gly Ile Arg Arg Gln Tyr His Leu Met Ile Ala
                        55
Leu Leu Cys Ala Val Ser Asp Leu Leu Ile Cys Ala Gly Ile Phe
Gly Gly Ser Ala Leu Leu Met Gln Ser Pro Trp Leu Leu Ala Leu Val
                                    90
Thr Trp Gly Gly Val Ala Phe Leu Leu Trp Tyr Gly Phe Gly Ala Leu
            100
                                105
                                                    110
Lys Thr Ala Met Ser Ser Asn Leu Glu Leu Ala Ser Ala Glu Val Met
                            120
                                                125
Lys Gln Gly Arg Trp Lys Ile Ile Val Thr Met Leu Ala Val Thr Trp
                        135
                                            140
Leu Asn Pro His Val Tyr Leu Asp Thr Phe Val Val Leu Gly Ser Leu
                    150
                                        155
Gly Gly Gln Leu Asp Val Glu Pro Lys Arg Trp Phe Ala Leu Gly Thr
                165
                                    170
Val Ser Ala Ser Phe Leu Trp Phe Phe Gly Leu Ala Ile Leu Ala Ala
                                185
Trp Leu Ala Pro Arg Leu Arg Thr Ala Lys Ala Gln Arg Ile Ile Asn
                            200
Thr Leu Val Gly Leu Val Met Trp Phe Ile Ala Phe Gln Leu Ala Lys
                        215
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Glu Asp Ile His His Val Gln Gly Leu Phe Asn

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<210> 9914
<211> 232
<212> PRT
<213> Enterobacter cloacae
<400> 9914
Cys Ala Leu Ser Phe His Thr Thr Gly Lys Thr Ile Met Thr Gln Asp
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Glu Leu Lys Lys Ala Val Gly Trp Ala Ala Leu Gln Tyr Val Gln Pro
                                25
Gly Thr Ile Val Gly Val Gly Thr Gly Ser Thr Ala Ala His Phe Ile
Asp Ala Leu Gly Thr Met Lys Gly Gln Ile Glu Gly Ala Val Ser Ser
                        55
Ser Asp Ala Ser Thr Glu Lys Leu Lys Ser Leu Gly Ile Thr Val Phe
                    70
Asp Leu Asn Glu Val Asp Arg Leu Gly Ile Tyr Val Asp Gly Ala Asp
                85
Glu Ile Asn Gly His Met Gln Met Ile Lys Gly Gly Gly Ala Ala Leu
            100
                                105
Thr Arg Glu Lys Ile Ile Ala Ser Val Ala Asp Lys Phe Ile Cys Ile
                            120
Ala Asp Ala Ser Lys Gln Val Asp Ile Leu Gly Asn Phe Pro Leu Pro
                        135
                                            140
Val Glu Val Ile Pro Met Ala Arg Ser Ala Val Ala Arg Gln Leu Val
                    150
                                        155
Lys Leu Gly Gly Arg Pro Glu Tyr Arg Gln Gly Val Val Thr Asp Asn
                                    170
                165
Gly Asn Val Ile Leu Asp Val His Gly Leu Glu Ile Leu Asp Ala Ile
                                185
Ala Leu Glu Asn Ala Ile Asn Gly Ile Pro Gly Val Val Thr Val Gly
                            200
Leu Phe Ala Asn Arg Gly Ala Asp Val Ala Leu Ile Gly Thr Ala Asp
                        215
Gly Val Lys Thr Ile Val Lys
<210> 9915
<211> 411
<212> PRT
<213> Enterobacter cloacae
<400> 9915
Met Ala Lys Val Ser Leu Glu Lys Asp Lys Ile Lys Phe Leu Leu Val
                                    10
Glu Gly Val His Gln Lys Ala Leu Asp Ser Leu Arg Ala Ala Gly Tyr
Thr Asn Ile Glu Phe His Lys Gly Ala Leu Asp Thr Glu Glu Leu Lys
Ala Ser Ile Arg Asp Ala His Phe Ile Gly Leu Arg Ser Arg Thr Gln
Leu Thr Glu Asp Val Ile Ala Ala Ala Glu Lys Leu Val Ala Ile Gly
                                        75
Cys Phe Cys Ile Gly Thr Asn Gln Val Asp Leu Asn Ala Ala Lys
                                    90
                85
Arg Gly Ile Pro Val Phe Asn Ala Pro Phe Ser Asn Thr Arg Ser Val
                                105
Ala Glu Leu Val Ile Gly Glu Leu Leu Leu Leu Arg Gly Ile Pro
                            120
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Glu Ala Asn Ala Lys Ala His Arg Gly Val Trp Asn Lys Leu Ala Ala

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135
                                           140
Gly Ser Tyr Glu Ala Arg Gly Lys Lys Leu Gly Ile Ile Gly Tyr Gly
                   150
                                 155
His Ile Gly Thr Gln Leu Gly Ile Leu Ala Glu Ser Leu Gly Met His
                                   170
               165
Val Phe Phe Tyr Asp Ile Glu Ser Lys Leu Pro Leu Gly Asn Ala Thr
                               185
                                                  190
Gln Val Gln His Leu Ser Asp Leu Leu Asn Met Ser Asp Val Val Ser
                           200
                                               205
Leu His Val Pro Glu Asn Ala Ser Thr Lys Asn Met Met Gly Ala Glu
                       215
Glu Leu Ala Leu Met Lys Pro Gly Ser Leu Leu Ile Asn Ala Arg
                                        235
                · 230
Gly Thr Val Val Asp Ile Pro Ala Leu Cys Asp Ala Leu Lys Arg Lys
               245
                                    250
His Leu Ala Gly Ala Ala Ile Asp Val Phe Pro Thr Glu Pro Ala Thr
                                265
           260
Asn Ser Asp Pro Phe Thr Ser Pro Leu Cys Glu Phe Asp Asn Val Ile
       275
                            280
                                                285
Leu Thr Pro His Ile Gly Gly Ser Thr Gln Glu Ala Gln Glu Asn Ile
                        295
                                            300
Gly Leu Glu Val Ala Gly Lys Leu Ser Lys Tyr Ser Asp Asn Gly Ser
                   310
                                        315
Thr Leu Ser Ala Val Asn Phe Pro Glu Val Ser Leu Pro Leu His Gly
                                    330
                325
Gly Arg Arg Leu Leu His Ile His Glu Asn Arg Pro Gly Val Leu Thr
           340
                                345
Ala Ile Asn Gln Ile Phe Ala Glu Gln Gly Val Asn Ile Ala Ala Gln
                            360
Tyr Leu Gln Thr Asn Ser Gln Met Gly Tyr Val Val Ile Asp Ile Glu
                        375
                                            380
Ala Asp Glu Asp Ile Ala Glu Lys Ala Leu Gln Ser Met Lys Ala Ile
                   390
                                        395
Pro Gly Thr Ile Arg Ala Arg Leu Leu Tyr
                405
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<211> 374

<212> PRT

<213> Enterobacter cloacae

<400> 9916

Phe Pro Gly Arg Glu His Ile Ser Ser Cys Arg Trp Leu Ile Thr Gln 10 Thr Ser Arg Met His Lys Lys Asp Asn His Ile Arg Gly Gln Ser Arg 25 Phe Cys Pro His Lys Arg Leu Asn Asn Ala Phe Met Leu His Ala Ser 40 Thr Ser Pro Phe Tyr Pro Leu Phe Ala Ala Leu Asp Val Asn Ala Lys 55 60 Ile His Glu Gly Glu Ser Gly Arg Arg Leu Trp Ala Glu Cys Val Glu 70 75 Leu Gly Ile Glu Ala Arg Lys Ala Ile Ile Ala Asn Cys His Met Ile 85 90 Lys Pro Phe Ile Pro Pro Val Val Ala Gly Arg Pro Trp Gln Asp His 105 110 Pro Thr Gln Ala Ile Ala Ser Glu Arg Arg Phe Phe Ser Phe Glu Pro 120 125 Gly Ala Lys Trp His Gly Phe Glu Gly Tyr Ala Arg Glu Gln Tyr Phe 135 140 Val Asp Pro Cys Lys Leu Leu Thr Thr Pro Gly Ile Asp Ala Glu

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150
                                        155
Thr Gly His Tyr Thr Asp Phe Gly Ile Pro Ala Thr Ile Leu Ala His
               165
                                170
Tyr Leu Arg Glu Asn Gly Ile Val Pro Glu Lys Cys Asp Leu Asn Ser
           180
                               185
                                                    190
Ile Leu Phe Leu Leu Thr Pro Ala Glu Ser Ala Glu Lys Leu Met Gln
                            200
                                                205
Leu Val Ala Met Leu Gly Gln Phe Glu Gln His Ile Glu Asp Asp Thr
                        215
                                            220
Pro Leu Ala Asp Val Leu Pro Thr Ile Tyr Gln Lys Tyr Pro Val Arg
                    230
                                        235
Tyr Arg Asp Tyr Thr Ile Arg Gln Leu Cys Gln Glu Met His Asp Leu
                                    250
Tyr Val Ser Phe Asn Val Lys Asp Leu Gln Lys Ala Met Phe Arg Gln
                                265
Glu Ser Leu Pro Ala Val Val Met Asn Pro Gln Asp Ala Asn Gln Glu
                            280
Tyr Ile Arg Gly Asn Val Glu Leu Val Arg Ile Arg Asp Ala Glu Gly
                        295
                                            300
Arg Ile Ala Ala Glu Gly Ala Leu Pro Tyr Pro Pro Gly Val Leu Cys
                    310
                                        315
Val Val Pro Gly Glu Val Trp Gly Gly Ala Val Gln Arg Tyr Phe Leu
                325
                                    330
Ala Leu Glu Glu Gly Ile Asn Met Leu Pro Gly Phe Ser Pro Glu Leu
                                345
Gln Gly Val Tyr Ser Glu Lys Asp Ala Asp Gly Ile Lys Arg Leu Tyr
        355
                            360
Gly Tyr Val Leu Lys
   370
<210> 9917
<211> 308
<212> PRT
<213> Enterobacter cloacae
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<400> 9917

Arg Leu His Leu Ser Ala Asp Ser Gly Gln Leu Pro Arg Leu Ser Phe 10 Gln Glu Arg Thr Met Lys Leu Ala Ser Phe Leu Tyr Gln Gly Lys Arg 25 Ser Tyr Gly Ile Val Gln Ala Asp Gly Val Ile Asp Leu Gly Arg Arg 40 Leu Gly Asp Arg Tyr Gly Asp Leu Lys Ala Leu Leu Gln Gly Asn Gly 55 Leu Ala Gln Ala Thr Arg Phe Leu Asn Asp Ala Val Asp Val Pro Leu 70 75 Asn Ala Ile Thr Phe Leu Pro Val Ile Val Gln Pro Glu Lys Ile Leu 90 Cys Val Gly Met Asn Tyr Ala Asp Lys Arg Lys Glu Phe Asp Gln His 105 Asn Pro Ala Pro Thr Leu Phe Val Arg Phe Pro Asp Ser Gln Thr Gly 120 125 His Asn Glu Pro Val Leu Lys Pro Arg His Ser Ser Glu Phe Asp Tyr 135 140 Glu Gly Glu Leu Ala Val Ile Ile Gly Lys Gly Gly Glu Asn Ile Ser 150 155 Arg Asp Asp Ala Leu Arg His Val Ala Gly Tyr Ser Cys Tyr Met Asp 165 170 Gly Ser Ala Arg Asp Trp Gln His Thr Trp Phe Thr Ala Gly Lys Asn 185 Trp Arg Gln Thr Gly Ala Phe Gly Pro Trp Met Ala Thr Ala Asp Glu

5438 200 205 Ile Pro Asp Pro His Gln Leu Ala Ile Arg Thr Trp Leu Asn Gly Arg 215 220 Met Val Gln Glu Asp Asn Thr Ser Ser Met Ile His Lys Val Ala Glu 230 235 Leu Ile Glu Tyr Ile Ser Thr Phe Thr Arg Leu Ser Pro Gly Asp Val 245 250 Ile Ile Thr Gly Ser Pro Gly Gly Val Gly Lys Lys Arg Asn Pro Pro 265 Leu Phe Met Lys Glu Gly Asp Arg Ile Glu Val Glu Ile Glu His Ile 280 Gly His Leu Ser Asn Val Ile Val Glu Ala Pro Ala Val Gly Leu Ala Ala Ala His 305 <210> 9918 <211> 129 <212> PRT <213> Enterobacter cloacae <400> 9918 Thr Ala Trp Pro Ser Ser Trp Ser Arg Arg Met Gly Leu Asn Val Arg 10 Glu Gly Glu Ile Met Ala Lys Asn Arg Ser Arg Arg Leu Arg Lys Lys 20 25 Met His Ile Glu Glu Phe Gln Glu Val Gly Phe Ser Val Ala Trp Arg 40 Phe Pro Glu Gly Thr Ser Val Glu Gln Ile Asp Gln Asp Val Asp Ala 55 Phe Ile Asn Glu Val Ile Glu Pro Asn Lys Leu Ala Phe Asp Gly Ser 70 75 Gly Tyr Leu Ala Trp Glu Gly Leu Ile Cys Thr Gln Glu Val Gly Lys 85 90 Cys Thr Glu Glu His Gln Ala Leu Val Arg Lys Trp Leu Glu Asp His 105

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<210> 9919
<211> 257
<212> PRT
<213> Enterobacter cloacae
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115

<400> 9919

 Ser
 Lys
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 Pro
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 Leu
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 Val

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Lys Leu Glu Asp Val Arg Val Ser Glu Leu Phe Asp Val Trp Trp Asp

Glu Lys Ser Arg Val Ala Leu Asp Lys Ile Ile Thr Lys Glu Val Gly 120 Glu Ser Ser Asn Met Arg Thr Arg Leu Thr Lys Leu Asp Lys Gln Leu 140 135 Lys Glu Gln Met Asn Arg Ile Ile Glu Thr Arg Ser Asp Gly Leu Thr 150 155 Phe His Tyr Lys Ala Ile Asp Gln Val Arg Ala Asp Gly Gln Gln Leu 165 170 Val Asn Gln Ala Met Gly Gly Ile Leu Gln Asp Ser Ile Asn Glu Met 180 185 Gly Ala Lys Ala Val Leu Lys Gly Gly Gly Asn Pro Leu Gln Gly Val 200 Leu Gly Ser Leu Gly Gly Leu Gln Thr Ser Ile Gln Asn Glu Trp Lys 215 220 Asn Gln Glu Ala Asp Phe Gln Gln Phe Gly Lys Asp Val Cys Lys Arg 230 235 Val Val Ser Leu Glu Asp Ser Arg Lys Ala Leu Val Gly Thr Leu Lys 250

<210> 9920 <211> 316 <212> PRT <213> Enterobacter cloacae <400> 9920 Cys Ile Asp Phe Ile Arg Gl

Cys Ile Asp Phe Ile Arg Gly Gln Asp Met Ser Thr Leu Gly His Gln 10 Tyr Asp Asn Ser Leu Val Ser Asn Ala Phe Gly Phe Leu Arg Leu Pro 20 25 Met Asn Phe Gln Pro Tyr Asp Ser Asp Ala Asp Trp Val Ile Thr Gly 40 Val Pro Phe Asp Met Ala Thr Ser Gly Arg Ala Gly Gly Arg His Gly 55 Pro Ala Ala Ile Arg Gln Val Ser Thr Asn Leu Ala Trp Glu His Asn 70 75 Arg Phe Pro Trp Asn Phe Asp Met Arg Glu Arg Leu Asn Val Val Asp 90 85 Cys Gly Asp Leu Val Tyr Ala Phe Gly Asp Ala Arg Glu Met Ser Glu 100 105 Lys Leu Gln Ala His Ala Glu Lys Leu Leu Ala Ala Gly Lys Arg Met 120 125 Leu Ser Phe Gly Gly Asp His Phe Val Thr Leu Pro Leu Leu Arg Ala 135 140 His Ala Lys His Phe Gly Lys Met Ala Leu Val His Phe Asp Ala His 150 155 Thr Asp Thr Tyr Ala Asn Gly Cys Glu Phe Asp His Gly Thr Met Phe 170 Tyr Thr Ala Pro Lys Glu Gly Leu Ile Asp Pro Asn His Ser Val Gln 185 Ile Gly Ile Arg Thr Glu Phe Asp Lys Asp Asn Gly Phe Thr Val Leu 200 Asp Ala Gly Gln Val Asn Asp Arg Gly Val Asp Asp Ile Leu Ala Gln 215 220 Val Lys Gln Ile Val Gly Asp Met Pro Val Tyr Leu Thr Phe Asp Ile 230 235 Asp Cys Leu Asp Pro Ala Phe Ala Pro Gly Thr Gly Thr Pro Val Ile 245 250 Gly Gly Leu Thr Ser Asp Arg Ala Ile Lys Leu Val Arg Gly Leu Lys

Asp Leu Asn Ile Val Gly Met Asp Val Val Glu Val Ala Pro Ala Tyr 275 280 285
Asp Gln Ser Glu Ile Thr Ala Leu Ala Ala Ala Thr Leu Ala Leu Glu 290 295 300

Met Leu Tyr Ile Gln Ala Ala Lys Lys Gly Glu 305 310 315

<210> 9921

<211> 257

<212> PRT

<213> Enterobacter cloacae

<400> 9921

Ser Thr Ala Gly Ser Arg Leu Met Asn Gly Leu Leu Ser Gly Lys Arg 10 Ile Val Ile Thr Gly Ala Ala Arg Gly Leu Gly Phe His Phe Ala Lys 25 Ala Cys Ala Glu Gln Gly Ala Ala Val Val Met Cys Asp Ile Leu Lys 40 Gly Glu Leu Ala Glu Ser Ala His Ala Leu Ser Glu Arg Gly Tyr Ala 55 Ile Glu Pro His Val Ile Asp Leu Ala Asp Pro Gln Ser Ile Glu Gln 75 70 Val Phe Ser Ala Ile Gly Glu Gln Gly Gln Ile Asp Gly Leu Val Asn 85 90 Asn Ala Ala Met Ala Thr Gly Val Gly Gly Lys Asn Met Leu Asp Tyr 100 105 Asp Pro Asp Leu Trp Asp Arg Val Met Ser Val Asn Val Lys Gly Thr 120 115 Trp Leu Val Thr Arg Ala Ala Val Pro Leu Leu Arg Glu Gly Ala Gly 135 140 Ile Val Asn Val Ala Ser Asp Thr Ala Leu Trp Gly Ala Pro Arg Leu 150 155 Met Ala Tyr Val Ala Ser Lys Gly Ala Val Ile Ala Met Thr Arg Ser 170 165 Met Ala Arg Glu Leu Gly Glu Lys Arg Ile Arg Ile Asn Ala Ile Ala 180 185 Pro Gly Leu Thr Arg Val Glu Ala Thr Glu Tyr Val Pro Ala Glu Arg 195 200 His Gln Leu Tyr Glu Asn Gly Arg Ala Leu Thr Gly Ala Gln Gln Pro 215 220 Glu Asp Val Thr Gly Ser Val Val Trp Leu Leu Ser Asp Leu Ser Arg 230 235

<210> 9922

<211> 267

<212> PRT

<213> Enterobacter cloacae

<400> 9922

Phe Ile Thr Gly Gln Leu Ile Pro Val Asn Gly Gly Phe Val Phe Asn

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55
                                            60
Glu Arg Asn Thr Arg Thr Asn Thr Phe Ser Leu Gly Met Asn Val Leu
                    70
                                        75
Arg Leu Gly Phe Glu Tyr Ile Ala Ser Leu Asp Val Ala Gln Val Gly
               85
                                    90
Gln Pro Val Ile Glu Gln Leu Arg Asp Val Ser Gln Cys Ser Ser His
           100
                               105
Leu Ala Ile Arg Asp Gly Arg Asp Ile Ile Tyr Ile Ala Arg Val Ser
                            120
Ala Ala Gly Ser Arg Ile Asn Gln Val Ser Ile Gly Thr Arg Leu Pro
                        135
Val His Cys Thr Ser Leu Gly Arg Met Leu Leu Thr Asp Ile Ser Arg
                    150
                                        155
Ala Asp Phe Glu Gln Leu Phe Pro His Glu Arg Leu Pro Gly Asn Thr
                165
                                    170
Pro Gly Gln Leu His Asp Arg Glu Ala Leu Trp Gln Met Val Gln Gln
                                185
Asp Lys Ala Arg Gly Tyr Val Ile Gly Glu Ser Phe Phe Arg His Gly
                            200
                                                205
Ile Ser Ser Ile Val Tyr Pro Val Tyr Asp Arg Ser Gly Arg Val Ala
                        215
                                            220
Ala Val Val Ser Ile Leu Val Pro Ser Glu Glu Ile Pro Gln Ser Asp
                    230
                                        235
Arg Glu Arg Leu Gln Asn Glu Val Arg Leu Ala Ala Asp Lys Ile Ser
                                    250
                245
Gly Phe Leu Gly Tyr Leu Ser Gln Ala Ser
            260
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<210> 9923 <211> 326

<212> PRT

<213> Enterobacter cloacae

<400> 9923

Leu Arg Arg Ala Cys Phe Thr Pro Asn Leu Gly Gln Met Arg Gln Arg 10 Thr Met Ser Val Thr Gly Ile Glu Lys Leu Glu Phe Gly Val Glu Asp 25 Leu Thr His Cys Ala Lys Phe Met Arg Asp Phe Gly Leu Thr Gly Asp 40 Ala Ser Gly Gln Arg Phe Thr Thr Leu Ser Gly Ala Arg Val Glu Leu Asn Pro Ile Asp Ser Pro Asp Leu Pro Pro Ala Phe Glu Ala Gly Asn 70 Thr Leu Arg Arg Met Thr Trp Ala Val Ala Ala Gln Ser Asp Leu Asp 90 Ala Leu Arg Pro Lys Leu Ala Gln Gln Pro Gly Phe Arg Glu Val Gly 105 Asp Ala Leu Glu Cys Leu Asp Pro Asn Gly Met Thr Leu Arg Val Gln 120 Val Thr Gln Gln Thr Asp Val Glu Leu Asn Val Glu Pro Ile Asn Gln 135 140 Trp Gly Asp Ala Arg Arg Ile Asp Thr Pro Ser Pro Val Tyr Asp Arg 150 155 Ala Gln Pro Ile Asn Val Gly His Val Val Phe Phe Val Glu Glu Leu 170 165 Ala Ala Val Glu Lys Phe Tyr Arg Glu Val Leu Gly Phe Gln Val Ser 185 190 Asp Arg Tyr Ile Asn Arg Ala Val Phe Leu Arg Cys Gly Val Arg Gly 200 Gly His His Asn Leu Phe Leu Leu Gln Leu Pro Asn Arg Lys Arg Gly

215 220 Leu Asn His Val Ala Phe Thr Val Arg Asp Ile His Glu Val Ile Gly 230 235 Gly Gly Ile Ala Met Asn Lys His Asp Trp Ser Thr Phe Ile Gly Pro 250 245 Gly Arg His Pro Val Ser Ser Ala Tyr Phe Trp Tyr Val Asn Ser Pro 265 Thr Gly Gly Ala Phe Glu Tyr Tyr Thr Asn Asp Asp Tyr Leu Thr Glu 280 Asn Trp Gln Pro Arg Glu Leu Glu His Ser Leu Val Ser Phe Thr Glu 295 Trp Ala Val Glu Gly Gly Ile Asp His Asp Thr Arg Arg Gln Gln Lys 315 310 Lys Pro Glu Ala Val

<210> 9924

<211> 426

<212> PRT

<213> Enterobacter cloacae

<400> 9924 Pro Ala Pro Val Gly Gly Glu Met Thr Thr Leu Glu Thr Asn Thr Ala Pro Val Glu Ala Ser Gly Glu Gly Thr Arg Thr Pro Glu Lys Ala Val 20 Arg Trp Ala Ile Pro Leu Ser Leu Leu Ala Cys Val Leu Leu Ala Phe Phe Asp Lys Ile Ser Ile Ala Ala Leu Phe Ser Asp Thr His Phe Gln 60 Gln Ala Met Gly Ile Asp Phe Asp Thr Thr Arg Leu Gly Ile Leu Met 70 75 Ser Ala Phe Leu Leu Ser Tyr Gly Phe Ser Ser Val Phe Leu Ser Gly 90 Leu Gly Asp Lys Ile Ala Pro Leu Arg Leu Leu Thr Gly Met Met Ala 105 100 Val Trp Cys Val Leu Met Val Ala Met Gly Phe Thr His Asn Tyr Thr 120 Leu Met Ile Val Leu Arg Ile Leu Leu Gly Val Ala Glu Gly Pro Leu 135 Phe Pro Leu Ala Phe Ala Ile Val Arg His Asn Phe Pro Gln His Leu 150 Gln Ala Arg Ala Thr Met Leu Trp Leu Leu Gly Thr Pro Val Gly Ala 165 170 Ala Ile Gly Phe Pro Leu Ser Leu Trp Leu Leu Asn Thr Phe Gly Trp 180 185 Gln Ser Thr Phe Phe Val Met Ala Met Leu Thr Val Pro Val Leu Ile 200 Leu Val Arg Ile Gly Leu Arg Gly Ile Arg Leu Glu Ala Lys Pro Gly 220 215 Thr Ser Gln Ala Ser Gln Asp Glu Arg Arg Ala Ala Arg Arg Glu Leu 230 235 Phe Val Ser Pro His Phe Trp Ile Ile Cys Ile Phe Asn Ile Ala Phe 250 245 Leu Thr Tyr Leu Trp Gly Ile Asn Gly Trp Leu Pro Gly Tyr Leu Ile 270 260 265 Lys Gly Lys Gly Ile His Leu Glu His Ala Gly Trp Leu Ser Ser Met 280 285 275 Pro Phe Ile Ala Met Leu Ala Gly Glu Val Ile Gly Ala Trp Leu Ser 300 295 Asp Arg Val Asp Lys Arg Ala Ala Cys Phe Ile Ser Met Ala Gly

5443 310 315 Ala Ala Val Gly Leu Ala Ala Val Met His Leu Asp Thr Pro Leu Ala 325 330 Ile Ile Ala Ala Met Ser Phe Ser Thr Phe Met Trp Gly Thr Gly Ala 340 345 Pro Asn Ile Phe Ala Leu Leu Ala Lys Ala Thr His Pro Arg Val Ser 360 Ala Thr Ala Gly Gly Ile Phe Asn Gly Leu Gly Asn Phe Ala Gly Ala 375 Leu Ser Pro Ala Val Met Gly Ala Leu Ile Ala Phe Thr His Ser Met 390 395 Asp Ser Gly Leu Ile Phe Leu Ala Val Met Ala Ala Val Gly Cys Val 405 410 Leu Leu Pro Leu Leu Arg Arg Tyr 420 <210> 9925 <211> 548 <212> PRT <213> Enterobacter cloacae <400> 9925

Ala Met Ser Glu Met Ile Thr Val Gly Asp Ala Ile Ala Arg Thr Leu Glu Gln Tyr Gln Val Glu Ala Ile Tyr Gly Val Ile Ser Ile His Asn 25 20 Leu Pro Ile Ala Asp Ala Val Gly Gln Arg Gly Asn Ile Arg Phe Val 40 Pro Ala Arg Gly Glu Ala Gly Ser Val Thr Met Ala Asp Ala His Gly 55 Arg Phe Ser Gly Leu Gly Val Ala Leu Thr Ser Thr Gly Ala Gly Ala 70 75 Gly Asn Ala Val Gly Ala Leu Val Glu Ala Met Asn Ala Cys Thr Pro 85 90 Leu Leu His Leu Thr Gly Gln Val Glu Lys Ala Trp Leu Asp Ala Asp 105 110 100 Thr Gly Phe Ile His Glu Thr Arg Asp Gln Leu Thr Phe Leu Lys Ala 120 Ser Ser Lys Arg Ala Tyr Arg Ile Ser Asn Ala Asn Gln Ala Ile Ala 135 140 Ile Leu His Lys Ala Ile Gln Asp Ala Gln Thr Pro Pro Cys Gly Pro 150 155 Val Ser Val Glu Ile Pro Ile Asp Ile Gln Ser Ala Lys Ile Pro Leu 165 170 Ser Leu Val Thr Ala Pro Ile Lys Pro Val Ser Ala Pro Ala Val Asp 180 185 Thr Gly Met Val Asp Ala Leu Trp Ala Gln Leu Lys Gln Ala Lys Gln 200 Pro Leu Leu Trp Leu Gly Gly Gly Ala Leu Gly Ser Ala Glu Ala Val 215 220 Lys Lys Leu Ala Asp Ala Gly Ile Thr Val Ile Ser Ser Thr His Ala 230 235 Arg Gly Val Leu Pro Asp Asn His Arg Ala Ser Leu Arg Ala Phe His 250 245 Asn Ser Pro Ser Val Glu Ala Leu Ile Ala Gln Cys Asp Phe Thr Leu 260 265 Val Ala Gly Ser Arg Leu Arg Ser Asn Glu Thr Arg Ser Trp Thr Leu 280 285 Glu Leu Pro Ser Pro Arg Val Gln Leu Asp Ile Asp Pro Ala Ala Ala 295 300 Ser Arg Asn Tyr Leu Met Asp Ser Thr Leu Ile Ala Asp Cys Ser Ala

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310
                                         315
Leu Leu Gly Ala Leu Ala Glu Lys Val Gln Gly Arg Glu Trp Gly Asn
                325
                                    330
Ala Gln Trp Asp Thr Gln Val Gln Gln Ala Val Gly Gln Ala Glu Gln
            340
                                345
Gly Leu Arg Glu Gln Cys Gly Ala Tyr Ala Lys Leu Asn Asp Ala Ile
                            360
                                                 365
Glu Lys Ala Leu Pro Lys Asp Gly Leu Leu Val Arg Asp Ile Thr Val
                        375
                                            380
Ser Gly Ser Leu Trp Gly Ser Arg Leu Phe Arg Ala Asn Gly Pro Leu
                                         395
                    390
Met Asn Ile His Ser Leu Ala Gly Ala Ile Gly Met Gly Leu Pro Met
                                    410
Ala Ile Gly Thr Ala Ile Ala Asn Pro Gln Arg Lys Val Val Gly Leu
            420
                                425
Val Gly Asp Gly Gly Leu Ser Leu Asn Leu Gly Glu Leu Ala Thr Leu
        435
                            440
Ala Gln Glu Lys Ala Asn Val Thr Leu Leu Ile Met Asn Asp Gly Gly
                        455
                                             460
Tyr Gly Val Met Arg Gly Ile Gln Asp Lys Tyr Phe Gly Gly Arg Gln
                    470
                                         475
Tyr Tyr Asn Ala Leu His Thr Pro Asp Phe Thr Leu Leu Ala Gln Ala
                485
                                    490
Ile Gly Leu Gln Ala Trp Ser Val Glu Gln Ala Glu Asp Phe Asp Ala
                                                     510
                                505
            500
Val Met Met Glu Ala Leu Ala Met Pro Gly Pro Ser Val Val Glu Val
                            520
Arg Met Gly Gln Ile Gly Ala Leu Lys Phe Ala Gly Pro Pro Gln Lys
                        535
                                             540
Thr Leu Tyr
545
<210> 9926
<211> 345
<212> PRT
<213> Enterobacter cloacae
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Leu Cys Arg Arg Ser Met Thr Val Arg Val Ala Ile Asn Gly Phe Gly
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Arg Ile Gly Arg Asn Val Val Arg Ala Leu Tyr Glu Ser Gly Arg Arg
Ala Glu Ile Thr Val Val Ala Ile Asn Glu Leu Ala Asp Ala Ala Gly
Met Ala His Leu Leu Lys Tyr Asp Thr Ser His Gly Arg Phe Ala Trp
                        55
Asp Val Arg Gln Glu Arg Glu Gln Leu Phe Val Gly Asp Asp Ala Ile
                    70
Arg Val Leu His Glu Asn Ser Ile Glu Gly Leu Pro Trp Arg Glu Leu
                85
Gly Val Asp Val Val Leu Asp Cys Thr Gly Val Tyr Gly Asn Arg Glu
            100
                                105
                                                     110
His Gly Glu Ala His Leu Asn Ala Gly Ala Lys Lys Val Leu Phe Ser
        115
                            120
                                                 125
His Pro Gly Ser Asn Asp Leu Asp Ala Thr Val Val Phe Gly Val Asn
```

135

150

165

Gln His Glu Leu His Ala Glu His Arg Ile Val Ser Asn Ala Ser Cys

Thr Thr Asn Cys Ile Ile Pro Val Ile Lys Leu Leu Asp Asp Ala Tyr

Gly Ile Glu Ser Gly Thr Val Thr Thr Ile His Ser Ala Met His Asp

140

155

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180
                                185
Gln Gln Val Ile Asp Ala Tyr His Pro Asp Leu Arg Arg Thr Arg Ala
                           200
                                               205
Ala Ser Gln Ser Ile Ile Pro Val Asp Thr Lys Leu Ala Ala Gly Ile
                        215
                                            220
Thr Arg Ile Phe Pro Gln Phe Asn Asp Arg Phe Glu Ala Ile Ala Val
                    230 .
                                        235
Arg Val Pro Thr Ile Asn Val Thr Ala Ile Asp Leu Ser Val Thr Val
                245
                                    250
Lys Lys Pro Val Lys Ala Cys Glu Val Asn Leu Leu Gln Lys Ala
            260
                                265
Ala Gln Gly Ala Phe His Gly Ile Val Asp Tyr Thr Glu Leu Pro Leu
                            280
Val Ser Val Asp Phe Asn His Asp Pro His Ser Ala Ile Val Asp Gly
                        295
Thr Gln Thr Arg Val Ser Gly Ala His Leu Ile Lys Thr Leu Val Trp
                    310
                                        315
Cys Asp Asn Glu Trp Gly Phe Ala Asn Arg Met Leu Asp Thr Thr Leu
                                    330
                325
Ala Met Ala Ala Lys Gly Phe Arg
            340
<210> 9927
<211> 393
<212> PRT
<213> Enterobacter cloacae
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Glu Val Ser His Ser Gly Ala Gly Lys Pro Ala Gln Phe Ser Ala Arg
Leu Ser Glu Leu Ala Pro Phe Leu Thr Ala Glu Asp Thr Gly Leu Ser
                                25
Asn Met Ser Lys Ile Phe Asp Phe Val Lys Pro Gly Val Ile Thr Gly
                            40
Asp Asp Val Gln Lys Val Phe Gln Val Ala Lys Glu Asn Asn Phe Ala
                        55
                                            60
Leu Pro Ala Val Asn Cys Val Gly Thr Asp Ser Ile Asn Ala Val Leu
                    70
                                        75
Glu Thr Ala Ala Lys Val Lys Ala Pro Val Ile Val Gln Phe Ser Asn
                85
                                    90
Gly Gly Ala Ala Phe Ile Ala Gly Lys Gly Val Lys Thr Asp Ile Pro
            100
                                105
                                                    110
Gln Gly Ala Ala Ile Leu Gly Ala Ile Ser Gly Ala His His Val His
        115
                            120
Gln Met Ala Glu His Tyr Gly Val Pro Val Ile Leu His Thr Asp His
                        135
                                            140
Cys Ala Lys Lys Leu Leu Pro Trp Ile Asp Gly Leu Leu Asp Ala Gly
                    150
                                        155
Glu Lys His Phe Ala Ala Thr Gly Lys Pro Leu Phe Ser Ser His Met
                                    170
Ile Asp Leu Ser Glu Glu Ser Leu Glu Glu Asn Ile Glu Ile Cys Ser
            180
                                185
                                                    190
Lys Tyr Leu Ala Arg Met Ser Lys Met Gly Met Thr Leu Glu Ile Glu
                            200
Leu Gly Cys Thr Gly Gly Glu Glu Asp Gly Val Asp Asn Ser His Met
                        215
                                            220
Asp Ala Ser Ala Leu Tyr Thr Gln Pro Glu Asp Val Asp Tyr Ala Tyr
                                        235
                    230
Thr Glu Leu Ser Lys Ile Ser Pro Arg Phe Thr Ile Ala Ala Ser Phe
                245
                                    250
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Gly Asn Val His Gly Val Tyr Lys Pro Gly Asn Val Val Leu Thr Pro

260 265 270 Thr Ile Leu Arg Asp Ser Gln Glu Tyr Val Ser Lys Lys His Asn Leu 280 285 Pro His Asn Ser Leu Asn Phe Val Phe His Gly Gly Ser Gly Ser Ser 295 300 Ala Gln Glu Ile Lys Asp Ser Val Ser Tyr Gly Val Val Lys Met Asn 310 315 Ile Asp Thr Asp Thr Gln Trp Ala Thr Trp Asp Gly Ile Leu Gln Tyr 325 330 Tyr Lys Thr Asn Glu Ala Tyr Leu Gln Gly Gln Leu Gly Asn Pro Lys 345 Gly Glu Asp Gln Pro Asn Lys Lys Tyr Tyr Asp Pro Arg Val Trp Leu 360 Arg Ala Ala Gln Thr Ser Met Ile Thr Arg Leu Glu Gln Ala Phe Lys 375 Glu Leu Asn Ala Val Asp Val Leu 390 <210> 9928 <211> 644 <212> PRT <213> Enterobacter cloacae <400> 9928 Ile Pro His Ser Val Ser Ser Gly Met Thr Arg Ser Asn Cys Trp Ile Gln Glu Thr Asp Met Leu Tyr Lys Gly Asp Thr Leu Tyr Val Asp Trp 20 25 Leu Glu Asp Gly Ile Ala Glu Leu Val Phe Asp Ala Pro Gly Ser Val 40 Asn Lys Leu Asp Thr Ala Thr Val Ala Ser Leu Gly Gln Ala Leu Asp 55 60 Val Leu Glu Lys Gln Ser Asp Leu Lys Gly Leu Leu Arg Ser Asn 70 75 Lys Ala Ala Phe Ile Val Gly Ala Asp Ile Thr Glu Phe Leu Ser Leu 90 85 Phe Leu Val Pro Glu Glu Gln Leu Ser Gln Trp Leu His Phe Ala Asn 100 105 Ser Val Phe Asn Arg Leu Glu Asp Leu Pro Val Pro Thr Leu Ser Ala 120 125 Val Asn Gly Tyr Ala Leu Gly Gly Gly Cys Glu Cys Val Leu Ala Thr 135 140 Asp Tyr Arg Leu Ala Thr Pro Asp Leu Arg Ile Gly Leu Pro Glu Thr 150 155 Lys Leu Gly Ile Met Pro Gly Phe Gly Gly Ser Val Arg Met Pro Arg 170 Met Leu Gly Ala Asp Ser Ala Leu Glu Ile Ile Ala Ala Gly Lys Asp 185 Val Gly Ala Glu Gln Ala Gln Lys Ile Gly Leu Val Asp Gly Val Val 200 Lys Pro Glu Lys Leu Val Glu Gly Ala Leu Ala Ile Leu Arg Gln Ala 215 220 Ile Asn Gly Asp Leu Asp Trp Lys Ala Lys Arg Gln Pro Lys Leu Glu 230 235 Pro Leu Lys Leu Ser Lys Ile Glu Ala Thr Met Ser Phe Thr Ile Ala 245 250 Lys Gly Met Val Met Gln Thr Ala Gly Lys His Tyr Pro Ala Pro Ile 265 270 Thr Ala Val Lys Thr Ile Glu Ala Ala Arg Leu Gly Arg Asp Asp 280

Ala Leu Lys Leu Glu Asn Gln Ser Phe Val Pro Leu Ala His Thr Asn

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300
    290
                        295
Glu Ala Arg Ala Leu Val Gly Ile Phe Leu Asn Asp Gln Phe Val Lys
                    310
                                       315
Gly Lys Ala Lys Gln Leu Thr Lys Asn Val Glu Thr Pro Lys His Ala
                325
                                    330
Ala Val Leu Gly Ala Gly Ile Met Gly Gly Gly Ile Ala Tyr Gln Ser
            340
                                345
                                                     350
Ala Trp Lys Gly Val Pro Val Val Met Lys Asp Ile Asn Glu Lys Ser
                            360
                                                365
Leu Thr Leu Gly Met Thr Glu Ala Ser Lys Leu Leu Asn Lys Gln Leu
                        375
                                            380
Glu Arg Gly Lys Ile Asp Gly Leu Lys Leu Ala Gly Val Ile Ser Thr
                    390
                                        395
Ile Gln Pro Val Leu Glu Tyr Ser Gly Phe Asp Arg Val Asp Val Val
                                    410
Val Glu Ala Val Val Glu Asn Pro Lys Val Lys Lys Ala Val Leu Ala
                                425
Glu Thr Glu Asp Lys Val Arg Pro Glu Thr Val Leu Ala Ser Asn Thr
                            440
Ser Thr Ile Pro Ile Ser Glu Leu Ala Ser Val Leu Lys Arg Pro Glu
                        455
                                             460
Asn Phe Cys Gly Met His Phe Phe Asn Pro Val His Arg Met Pro Leu
                    470
                                        475
Val Glu Val Ile Arg Gly Glu Lys Thr Ser Asp Glu Thr Ile Ala Lys
                485
                                    490
Val Val Ala Trp Ala Ser Lys Met Gly Lys Thr Pro Ile Val Val Asn
                                505
Asp Cys Pro Gly Phe Phe Val Asn Arg Val Leu Phe Pro Tyr Phe Ala
                            520
                                                525
Gly Phe Ser Gln Leu Leu Arg Asp Gly Ala Asp Phe Arg Lys Ile Asp
                        535
Lys Val Met Glu Lys Gln Phe Gly Trp Pro Met Gly Pro Ala Tyr Leu
                    550
                                        555
Leu Asp Val Val Gly Ile Asp Thr Ala His His Ala Gln Ala Val Met
                565
                                    570
Ala Ala Gly Phe Pro Gln Arg Met Gln Lys Asp Tyr Arg Asp Ala Ile
                                585
                                                    590
Asp Ala Leu Phe Asp Ala Asn Arg Phe Gly Gln Lys Asn Gly Leu Gly
                            600
Phe Trp Arg Tyr Lys Glu Asp Ser Lys Gly Lys Pro Lys Lys Glu Glu
                        615
                                            620
Asp Ala Ala Val Asp Gly Pro Ala Gly Arg Arg Gln Ser Ala Glu Thr
                    630
                                        635
Arg Leu His
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<211> 348

<212> PRT

<213> Enterobacter cloacae

## <400> 9929

 Met
 Phe
 Leu
 Leu
 Ser
 Gln
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 His
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 Pro
 Leu
 Gln
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70
                                        75
Asn Gly Asn Glu Glu Thr Gln Met Ser Gln Ile Glu Asn Met Ile Asn
               85
                                    90
Arq Gly Val Asp Val Leu Val Ile Ile Pro Tyr Asn Gly Gln Val Leu
           100
                               105
                                                    110
Ser Asn Val Val Lys Glu Ala Lys Gln Glu Gly Ile Lys Val Leu Ala
                           120
                                                125
Tyr Asp Arg Met Ile Asn Asn Ala Asp Ile Asp Tyr Tyr Ile Ser Phe
                       135
                                           140
Asp Asn Glu Lys Val Gly Glu Leu Gln Ala Lys Ser Leu Val Ala Lys
                   150
                                       155
Val Pro Gln Gly Asn Tyr Phe Leu Met Gly Gly Ser Pro Val Asp Asn
                                    170
Asn Ala Lys Leu Phe Arg Gln Gly Gln Met Lys Val Leu Lys Pro Tyr
                                185
Ile Asp Glu Gly Lys Ile Lys Val Val Gly Asp Gln Trp Ala Asp Gly
                            200
Trp Leu Pro Glu Asn Ala Leu Lys Ile Met Glu Asn Ala Leu Thr Ala
                        215
Asn Asn Asn Lys Ile Asp Ala Val Val Ala Ser Asn Asp Ala Thr Ala
                    230
                                        235
Gly Gly Ala Ile Gln Ala Leu Ser Ala Gln Gly Leu Ala Gly Lys Val
                                    250
                245
Ala Ile Ser Gly Gln Asp Ala Asp Leu Ala Gly Val Lys Arg Ile Ile
                                                    270
            260
                                265
Ala Gly Thr Gln Thr Met Thr Val Tyr Lys Pro Ile Thr Glu Leu Ala
                            280
Asn Thr Ala Ala Glu Ile Ala Val Glu Leu Gly Asn Gly Gln Gln Pro
                        295
Lys Ala Asp Ala Thr Leu Asn Asn Gly Leu Lys Asp Val Pro Ala Arg
                                        315
                    310
Leu Leu Thr Pro Ile Glu Val Asn Lys Glu Asn Ile Asp Ala Thr Val
                325
                                    330
Val Lys Asp Gly Phe His Lys Lys Ser Glu Leu
            340
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<210> 9930
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## <400> 9930

Ser Ser Ala Ala Pro Ala Arg Gln Gly Arg Ile Asp Leu Pro Cys Thr 10 Ser Val Gly Pro Cys Gly Ala Val Met Ser Tyr Leu Leu Glu Met Lys 25 Ser Ile Thr Lys Ala Phe Gly Ala Val Lys Ala Val Asp Asn Val Ser Leu Arg Leu Asn Pro Gly Glu Val Met Ser Leu Cys Gly Glu Asn Gly 55 Ser Gly Lys Ser Thr Leu Met Lys Val Leu Cys Gly Ile Tyr Pro His 75 Gly Ser Tyr Glu Gly Glu Ile Val Phe Ala Gly Glu Val Leu Gln Ala 85 Thr His Ile Arg Asp Thr Glu Arg Lys Gly Ile Ala Ile Ile His Gln 105 110 Glu Leu Ala Leu Val Lys His Leu Thr Val Leu Glu Asn Ile Phe Leu 120 125 Gly Ala Glu Leu Ser Arg His Gly Val Leu Asp Tyr Asp Thr Met Thr 135 140 Leu Arg Cys Glu Lys Leu Leu Ala Gln Val Ser Leu Ala Ile Ser Pro

<sup>&</sup>lt;211> 538

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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Asp Thr Arg Val Gly Asp Leu Gly Leu Gly Gln Gln Leu Val Glu
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                                170
Ile Ala Lys Ala Leu Asn Lys Gln Val Arg Leu Leu Ile Leu Asp Glu
           180
                               185
Pro Thr Ala Ser Leu Thr Glu Gln Glu Thr Ala Val Leu Leu Asn Ile
                           200
                                               205
Ile Arg Asp Leu Gln Asn His Gly Ile Ala Cys Ile Tyr Ile Ser His
                       215
                                            220
Lys Leu Asn Glu Val Lys Ala Ile Ser Asp Thr Ile Cys Val Ile Arg
                   230
                                        235
Asp Gly Gln His Ile Gly Thr Arg Glu Ala Glu Gly Met Ser Glu Asp
                245
                                   250
Asp Ile Ile Thr Met Met Val Gly Arg Glu Leu Thr Ala Leu Tyr Pro
                               265
Asn Glu Pro His Thr Ile Gly Glu Glu Leu Leu Arg Val Glu Asn Leu
                            280
Thr Ala Trp His Pro Val Asn Arg His Ile Lys Arg Val Asp Asn Leu
                        295
                                            300
Ser Phe Ser Leu His Arg Gly Glu Ile Leu Gly Ile Ala Gly Leu Val
                    310
                                        315
Gly Ala Gly Arg Thr Glu Ala Val Gln Cys Leu Phe Gly Val Trp Pro
                325
                                    330
Gly Arg Trp Glu Gly Lys Ile Tyr Ile Asp Gly Gln Pro Val Lys Ile
                                345
            340
Asp Asn Cys Gln Gln Ala Ile Ala Lys Gly Ile Ala Met Val Pro Glu
                            360
                                                365
Asp Arg Lys Lys Asp Gly Ile Val Pro Val Met Ala Val Gly Lys Asn
                        375
                                            380
Ile Thr Leu Ala Ala Leu Ser Gln Phe Ser Gly Ala Leu Ser Ser Leu
                    390
                                        395
Asp Asp Ala Ala Glu Gln Gln Cys Ile Leu Gln Ser Leu Ala Arg Leu
                405
                                    410
Lys Val Lys Thr Ser Ser Pro Glu Leu Ala Ile Gly Arg Leu Ser Gly
                                425
            420
Gly Asn Gln Gln Lys Ala Ile Leu Ala Arg Cys Leu Leu Leu Asn Pro
                            440
Arg Ile Leu Ile Leu Asp Glu Pro Thr Arg Gly Ile Asp Ile Gly Ala
                        455
                                            460
Lys Tyr Glu Ile Tyr Lys Leu Ile Asn Gln Leu Val Gln Gln Gly Ile
                    470
                                        475
Ala Val Ile Val Ile Ser Ser Glu Leu Pro Glu Val Leu Gly Leu Ser
                                    490
                485
Asp Arg Val Leu Val Met His Glu Gly Lys Leu Lys Ala Asn Leu Asn
            500
                                505
Asn Gln Asn Leu Thr Gln Glu Gln Val Met Glu Ala Ala Leu Arg Ser
                            520
Glu Arg His Val Glu Lys Gln Pro Val
    530
<210> 9931
<211> 528
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<213> Enterobacter cloacae
<400> 9931
Pro Ser Pro Thr Gly Arg Gly Arg Lys Pro Asn Arg Arg Pro Gly Lys
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Arg Ser Thr Arg Gln Leu Ser Glu Lys Lys Met Ser Glu Lys Glu Pro
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Phe Trp Leu Gly Ile Asp Cys Gly Gly Thr Tyr Leu Lys Ala Gly Leu

40 4.5 Tyr Asn Ser Gln Gly Lys Glu Val Cys Ile Glu Arg Arg Ser Val Ala 55 60 Thr Leu Ser Pro Arg Ala Gly Tyr Ala Glu Arg Asp Met His Gln Leu 70 75 Trp Gln His Cys His Ile Thr Val Ala Leu Leu Leu Lys Asn Ser Gly 85 90 Ala Asp Gly Gln Ile Lys Gly Val Gly Ile Ser Ala Gln Gly Lys 100 105 Gly Leu Phe Leu Leu Asp Lys Gln Asp Arg Pro Leu Gly Asn Ala Ile 120 125 Leu Ser Ser Asp Arg Arg Ala Leu Glu Ile Val Gln Arg Trp Gln Gln 135 Asp Gly Ile Pro Glu Lys Leu Tyr Pro His Thr Arg Gln Thr Leu Trp 150 155 Thr Gly His Pro Ala Ser Leu Leu Arg Trp Val Lys Glu Asn Glu Pro 165 170 Gln Arg Tyr Gln Gln Ile Gly Ser Val Met Met Ala His Asp Tyr Leu 185 180 Arg Trp Cys Leu Thr Gly Val Lys Gly Cys Glu Glu Ser Asn Ile Ser 200 205 Glu Ser Asn Leu Tyr Asn Met Asn Thr Gly Gln Tyr Asp Pro Gln Leu 220 215 Thr Arg Trp Leu Gly Ile Ser Asp Ile Asp Gly Ala Leu Pro Ser Ile 230 235 Ile Gly Ser Ala Glu Ile Cys Gly Glu Ile Thr Ala Gln Ala Ala Ala 250 245 Leu Thr Gly Leu Thr Ala Gly Thr Pro Val Val Gly Gly Leu Phe Asp 260 270 265 Val Val Ser Thr Ala Ile Cys Ala Gly Leu His Asp Glu His Thr Leu 280 285 Asn Ala Val Met Gly Thr Trp Ala Val Thr Ser Gly Ile Ala His Gly 295 300 Ile Arg Asp Asn Glu Pro Phe Pro Tyr Val Tyr Gly Arg Tyr Val His 315 310 Pro Gln Gln Phe Ile Val His Glu Ala Ser Pro Thr Ser Ser Gly Asn 330 325 Leu Glu Trp Leu Thr Ala Gln Trp Gly Asp Met Ser Phe Asp Glu Ile 340 345 350 Asn His Ala Val Ala Ser Leu Pro Lys Ala Glu Ser Asp Val Phe Phe 360 365 Leu Pro Phe Leu Tyr Gly Ser Asn Ala Gly Leu Glu Met Thr Ser Gly 375 380 Phe Tyr Gly Leu Gln Ala Leu His Thr Arg Ala His Leu Leu Gln Ala 390 395 Val Tyr Glu Gly Val Val Phe Ser His Met Thr His Leu Asn Arg Met 405 410 Leu Glu Arg Phe Pro His Val Gln Ala Leu Arg Val Thr Gly Gly Pro 420 425 Thr His Ser Asp Val Trp Met Gln Met Leu Ala Asp Val Ser Gly Leu 440 Ala Ile Glu Leu Pro Gln Val Glu Glu Thr Gly Cys Ser Gly Ala Ala 455 Leu Ala Ala Leu Val Gly Thr Gly Leu Tyr Pro Asp Phe Tyr Ala Ala 470 475 Gln Arg Ala Leu Arg His Asp Ile Arg Met Ile Glu Pro Asp Met Arg 485 490 Ala His Ala Ala Tyr Gln Arg Lys Tyr His Arg Tyr Gln Leu Leu Ile 505 Ser Ala Leu Gln Gly Tyr His Ala Arg Val Lys Glu Tyr Asp Leu

<210> 9932 <211> 241

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<213> Enterobacter cloacae
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Ser Pro Asn Ala Gly Arg Arg His Asp Met Leu Glu Gln Leu Lys Ala
                                    10
Glu Val Leu Ala Ala Asn Leu Ala Leu Pro Ala His Gln Leu Val Thr
                                25
Phe Thr Trp Gly Asn Val Ser Ala Val Asp Arg Ala Ser Gly Met Met
Val Ile Lys Pro Ser Gly Val Glu Tyr Asp Val Met Thr Ala Glu Asp
Met Val Val Asn Ile Ala Thr Gly Lys Val Val Glu Gly Ser Lys
                    70
                                        75
Lys Pro Ser Ser Asp Thr Pro Thr His Leu Ala Leu Tyr Arg Arg Tyr
                85
                                    90
Pro Glu Ile Gly Gly Ile Val His Thr His Ser Arg His Ala Thr Ile
            100
                                105
Trp Ser Gln Ala Gly Gln Asp Leu Pro Ala Trp Gly Thr Thr His Ala
                            120
Asp Tyr Phe Tyr Gly Ala Ile Pro Cys Thr Arg Leu Met Thr Thr Ala
                        135
                                            140
Glu Ile Ala Gly Glu Tyr Glu Tyr Gln Thr Gly Val Val Ile Ile Lys
                    150
                                        155
Thr Phe Glu Glu Arg Asp Ile Ser Pro Met Gln Val Pro Ala Val Leu
                                    170
                165
Val His Ser His Gly Pro Phe Ala Trp Gly Lys Asp Ala Ala Asp Ala
            180
                                185
Val His Asn Ala Val Val Leu Glu Glu Cys Ala Tyr Met Gly Leu Phe
                            200
Ser Arg Gln Leu Ala Pro Gln Leu Pro Val Met Gln Glu Leu Leu
                        215
                                            220
Glu Lys His Tyr Leu Arg Lys His Gly Ala Asn Ala Tyr Tyr Gly Gln
                    230
                                        235
<210> 9933
<211> 651
<212> PRT
<213> Enterobacter cloacae
<400> 9933
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Phe Asp Val Trp Val Asp Gly Lys Ile Lys Ser Gly Phe Glu Met Leu Val Asn Asn Phe Ser Ala Gly Ile Ile Gly Met Ile Leu Ala Ile Leu Ala Phe Leu Gly Ile Gly Pro Ala Val Glu Val Leu Ser Lys Leu Leu Ala Ala Gly Val Asn Phe Met Val Ala His Asp Met Leu Pro Leu Ala Ser Ile Phe Val Glu Pro Ala Lys Ile Leu Phe Leu Asn Asn Ala Ile Asn His Gly Ile Phe Ser Pro Leu Gly Ile Gln Gln Ser His Asp Leu Gly Lys Ser Ile Phe Phe Leu Ile Glu Ala Asn Pro Gly Pro Gly Met Gly Val Leu Leu Ala Tyr Met Phe Phe Gly Arg Gly Ser Ala Lys Gln Ser Ala Gly Gly Ala Ala Ile Ile His Phe Leu Gly Gly Ile His Glu Ile Tyr Phe Pro Tyr Val Leu Met Asn Pro Arg Leu Ile Leu Ala Val Ile Leu Gly Gly Met Thr Gly Val Phe Thr Leu Ser Val Leu Gly Gly Gly Leu Val Ser Pro Ala Ser Pro Gly Ser Ile Leu Ala Val Leu Ala Met Thr Pro Lys Gly Ala Tyr Phe Ala Asn Ile Ala Ala Ile Cys Ala Ala Met Ala Val Ser Phe Val Ala Ser Ala Ile Leu Leu Lys Thr Ser Lys Val Lys Glu Asp Asp Asp Ile Glu Ala Ala Thr Arg Arg Met His Asp Met Lys Ala Glu Ser Lys Gly Ala Thr Pro Leu Ala Ala Gly Asp Val Ser Asn Asp Leu Ser His Val Arg Lys Ile Ile Val Ala Cys Asp Ala Gly Met Gly Ser Ser Ala Met Gly Ala Gly Val Leu Arg Lys Lys Val Gln Asp Ala Gly Leu Thr Asn Ile Ser Val Thr Asn Ser Ala Ile Asn Ser Leu Pro Pro Asp Val Asp Leu Val Ile Thr His Arg Asp Leu Thr Glu Arg Ala Met Arg Gln Val Pro Gln Ala Gln His Ile Ser Leu Thr Asn Phe Leu Asp Ser Gly Leu Tyr Thr Ser Leu Thr Glu Arg Leu Val Ala Ala Gln Arg His Glu Asp Asn Glu Val Lys Val Arg Thr Ser Leu Gln Asp Ser Phe Asp Glu Ser Asn Ala His Leu Phe Lys Leu Gly Ala Glu Asn Ile Phe Leu Gly Arg Thr Ala Thr Asn Lys Glu Glu Ala Ile Arg Phe Ala Gly Glu Gln Leu Val Lys Gly Gly Tyr Val Gln Pro Glu Tyr Val Glu Ala Met Leu Glu Arg Glu Lys Leu Thr Pro Thr Tyr Leu Gly Glu Ser Ile Ala Val Pro His Gly Thr Val Glu Ala Lys Asp Arg Val Leu Lys Thr Gly Val Val Phe Cys Gln Tyr Pro Asp Gly Val Arg Phe Gly Glu Glu Asp Asp Ile Ala Arg Leu Val Ile Gly Ile 

Ala Ala Arg Asn Asn Glu His Ile Gln Val Ile Thr Ser Leu Thr Asn 610 615 620 .

Ala Leu Asp Asp Glu Thr Val Ile Glu Arg Leu Ala Asn Thr Thr Ser 625 630 630 635 640

Val Glu Glu Val Leu Ala Leu Leu Asn Lys 645

<210> 9934 <211> 592 <212> PRT

<213> Enterobacter cloacae <400> 9934 Pro Phe Ile Ala Ile Asn Pro Thr Ser Gln Tyr Trp Lys Asp His Phe 10 Tyr Thr Lys Cys Asp Ala Glu Met Ser Arg Asp Ser Pro Asp Glu His 20 25 Pro Cys Gly Pro Gln Glu Thr Cys Met Ser Leu Trp Gln Gln Asn Tyr 40 45 Asp Pro Ala Gly Asn Ile Trp Leu Ser Ser Leu Ile Ala Ser Leu Pro 55 Ile Leu Phe Phe Phe Ala Leu Ile Lys Leu Lys Gly Tyr 70 75 Leu Ala Ala Thr Tyr Thr Val Ala Ile Ala Leu Leu Val Ala Leu Phe 85 90 Phe Tyr Lys Met Pro Val Asp Arg Ala Leu Ala Ser Val Val Tyr Gly 105 100 Phe Phe Tyr Gly Leu Trp Pro Ile Ala Trp Ile Ile Ile Ala Ala Val 120 115 Phe Val Tyr Lys Ile Ser Val Lys Thr Gly Gln Phe Asp Ile Ile Arg 135 140 Ser Ser Ile Leu Ser Ile Thr Pro Asp Gln Arg Leu Gln Met Leu Ile 150 155 Val Gly Phe Ser Phe Gly Ala Phe Leu Glu Gly Ala Ala Gly Phe Gly 165 170 Ala Pro Val Ala Ile Thr Ala Ala Leu Leu Val Gly Leu Gly Phe Asn 180 185 190 Pro Leu Tyr Ala Ala Gly Leu Cys Leu Ile Val Asn Thr Ala Pro Val 200 Ala Phe Gly Ala Met Gly Ile Pro Ile Leu Val Ala Gly Gln Val Thr 215 Gly Leu Asp Ser Phe Glu Ile Gly Gln Met Val Gly Arg Gln Leu Pro 230 235 Phe Leu Thr Ile Ile Val Leu Phe Trp Ile Met Ala Ile Met Asp Gly 250

 Ser
 Phe
 Ala
 Ile
 Ala
 Gln
 Tyr
 Leu
 Ser
 Ser
 Asn
 Phe
 Leu
 Gln
 Gln
 Gln

 Leu
 Pro
 Asp
 Ile
 Ile
 Ser
 Ser
 Leu
 Val
 Ser
 Leu
 Val
 Cys
 Leu
 Thr
 Leu

 290
 295
 300
 300
 Phe
 Ala
 Asp
 Met

 305
 310
 315
 320

 Gly
 Ala
 Ser
 His
 Val
 Asp
 Gln
 Thr
 Leu
 Ala
 Arg
 Thr
 Gly
 Tyr
 Thr
 Ala

Trp Arg Gly Val Lys Glu Thr Trp Pro Ala Val Met Val Ala Gly Gly

355 360 365

Gly Ala Leu Tyr Asp Met Val Ile Asn Ile Ser Val Pro Phe Leu Asp 370 375 380

```
Lys Met Val Ala Arg Met Pro Pro Val Val His Asp Ala Thr Pro Tyr
                    390
                                        395
Ala Ala Val Phe Lys Phe Asp Trp Phe Ser Ala Thr Gly Thr Ala Ile
                405
                                    410
Leu Phe Ala Ala Ile Leu Ser Val Val Trp Leu Arg Met Lys Pro Ala
            420
                                425
                                                    430
Ala Ala Val Gln Thr Phe Ala Ala Thr Ile Lys Glu Leu Met Leu Pro
                            440
Ile Tyr Ser Ile Gly Met Val Leu Ala Phe Ala Phe Ile Ser Asn Tyr
                        455
Ser Gly Leu Ser Ser Thr Leu Ala Leu Ala Leu Ala His Thr Gly His
                    470
                                         475
Ala Phe Thr Phe Phe Ser Pro Phe Leu Gly Trp Leu Gly Val Phe Leu
                485
                                     490
Thr Gly Ser Asp Thr Ser Ser Asn Ala Leu Phe Ala Ala Leu Gln Ala
            500
                                505
Thr Ala Ala Gln Gln Ile Gly Val Ser Asp Val Leu Leu Val Ala Ala
                            520
                                                 525
Asn Thr Thr Gly Gly Val Thr Gly Lys Met Ile Ser Pro Gln Ser Ile
                        535
                                             540
Ala Ile Ala Cys Ala Ala Val Gly Leu Val Gly Lys Glu Ser Asp Leu
                    550
                                         555
Phe Arg Phe Thr Val Lys His Ser Leu Ile Phe Thr Cys Met Val Gly
                565
                                    570
Val Ile Thr Thr Leu Gln Ala Tyr Val Leu Thr Trp Met Ile Pro
            580
                                585
```

<211> 175

<212> PRT

<213> Enterobacter cloacae

<400> 9935

Trp Arg Arg Ala Ser Arg Ser Ala Cys Arg Lys Thr Ile Ala Thr Pro 10 Leu Thr Pro Cys Ser Thr Pro Thr Ala Leu Val Arg Lys Thr Val Trp 20 Ala Ser Gly Ala Ile Lys Lys Thr Ala Lys Ala Asn Arg Lys Lys 40 Lys Met Arg Arg Trp Met Ala Leu Leu Ala Asp Val Ser Gln Pro Lys 55 Arg Asp Phe Thr Asp Asp Glu Ile Ile Ala Arg Met Met Ile Pro Met 70 75 Ile Asn Glu Val Val Arg Cys Leu Glu Glu Gly Ile Ile Ala Ser Pro Ala Glu Ala Asp Met Ala Leu Val Tyr Gly Leu Gly Phe Pro Pro Phe 105 His Gly Gly Ala Phe Arg Trp Leu Asp Thr Leu Gly Ser Ala Arg Tyr 120 Leu Asp Met Ala Gln Gln Tyr Gln His Leu Gly Pro Leu Tyr Glu Val 135 140 Pro Glu Gly Leu Arg Asn Lys Ala Arg His Asn Glu Pro Tyr Tyr Pro 150 155 Ala Val Glu Pro Ala Arg Pro Val Gly Ala Leu Lys Thr Ala 170 175

<sup>&</sup>lt;210> 9936

<sup>&</sup>lt;211> 391

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
<400> 9936
Gly Val Thr Met Glu Lys Val Val Ile Val Asp Ala Ile Arg Thr Pro
                                     10
Met Gly Arg Ser Lys Gly Gly Ala Phe Arg Asn Val Arg Ala Glu Asp
                                25
Leu Ser Ala His Leu Met Arg Ser Leu Leu Ala Arg Asn Pro Ala Leu
                            40
Asp Pro Ala Ala Leu Asp Asp Ile Tyr Trp Gly Cys Val Gln Gln Thr
                        55
Leu Glu Gln Gly Phe Asn Ile Ala Arg Asn Ala Ser Leu Leu Ala Glu
                                         75
Ile Pro His Ser Val Pro Ala Val Thr Val Asn Arg Leu Cys Gly Ser
                                     90
Ser Met Gln Ala Leu His Asp Ala Thr Arg Met Ile Met Thr Gly Asp
            100
                                105
Ala Gln Ala Cys Leu Val Gly Gly Val Glu His Met Gly His Val Pro
                            120
                                                 125
Met Ser His Gly Val Asp Phe His Pro Gly Met Ser Arg Asn Val Ala
                        135
                                             140
Lys Ala Ala Gly Met Met Gly Leu Thr Ala Glu Met Leu Ser Arg Leu
                                         155
                    150
His Gly Ile Ser Arg Glu Met Gln Asp Ala Phe Ala Ala Arg Ser His
                165
                                     170
Ala Arg Ala Trp Ala Ala Thr Gln Ser Gly Ala Phe Lys Asn Glu Ile
            180
                                185
Ile Pro Thr Gly Gly His Asp Ala Asp Gly Val Leu Lys Gln Phe Ser
                                                 205
                            200
Tyr Asp Glu Val Ile Arg Pro Glu Thr Thr Val Glu Ala Leu Ser Thr
                        215
                                             220
Leu Arg Pro Val Phe Asp Pro Val Thr Gly Thr Val Thr Ala Gly Thr
                    230
                                         235
Ser Ser Ala Leu Ser Asp Gly Ala Ala Ala Met Leu Val Met Ser Glu
                                     250
Ser Arg Ala Arg Glu Leu Gly Leu Thr Pro Arg Ala Arg Val Arg Ser
                                 265
Met Ala Val Val Gly Cys Asp Pro Ser Ile Met Gly Tyr Gly Pro Val
                            280
                                                 285
Pro Ala Ser Lys Leu Ala Leu Lys Lys Ala Gly Leu Ser Ala Ser Asp
                                             300
Ile Asp Leu Phe Glu Met Asn Glu Ala Phe Ala Ala Gln Ile Leu Pro
                    310
Cys Ile Lys Asp Leu Gly Leu Met Asp Gln Ile Asp Glu Lys Ile Asn
                325
                                     330
Leu Asn Gly Gly Ala Ile Ala Leu Gly His Pro Leu Gly Cys Ser Gly
            340
                                 345
Ala Arg Ile Ser Thr Thr Leu Ile Asn Leu Met Glu Arg Lys Asp Ala
                            360
Gln Phe Gly Leu Ala Thr Met Cys Ile Gly Leu Gly Gln Gly Ile Ala
                        375
Thr Val Phe Glu Arg Val
                    390
<210> 9937
<211> 380
<212> PRT
<213> Enterobacter cloacae
```

```
20
                                25
Leu Arg Asn Arg Ser His Thr Phe Phe Ile Arg Asn Thr Glu Glu Leu
                            40
Met Gln Ser Lys Ile Asn Trp Ile Asp Asn Leu Arg Gly Ile Ala Cys
                        55
                                            60
Leu Met Val Val Met Ile His Thr Thr Trp Tyr Val Thr Asn Ala
                    70
                                        75
His Ser Ile Ser Pro Val Asn Trp Asp Val Ala Asn Val Leu Asn Ser
                                    90
Ala Ser Arg Val Ser Val Pro Leu Phe Phe Met Ile Ser Gly Phe Leu
                                105
Phe Phe Gly Glu Arg Ser Ala Gln Pro Arg His Phe Ile Arg Ile Val
                            120
Ser Cys Leu Leu Phe Tyr Ser Ala Ile Ser Leu Leu Tyr Ile Val Leu
                        135
                                            140
Phe Thr Ser Ile Asn Ala Glu Arg Ser Leu Leu Asn Leu Leu Gln Lys
                    150
                                        155
Pro Val Phe Tyr His Leu Trp Phe Phe Phe Ala Ile Ile Val Ile Tyr
                165
                                    170
Leu Val Ser Pro Leu Ile Gln Val Lys Asn Val Asn Gly Lys Met Leu
            180
                                185
                                                    190
Leu Ala Leu Met Val Val Ile Gly Ile Val Ala Asn Pro Asn Thr Val
                            200
                                                 205
Ser Gln Lys Ile Asp Gly Phe Glu Trp Leu Pro Val Asn Leu Tyr Ile
                                            220
                        215
Thr Gly Asp Thr Phe Tyr Tyr Val Leu Tyr Gly Met Leu Gly Arg Ala
                                        235
                    230
Ile Gly Met Met Glu Thr Gln Lys Arg Gly Ile Asn Trp Leu Cys Ala
                                    250
                245
Ala Ala Phe Leu Val Gly Val Phe Ile Ile Ser Arg Gly Thr Leu His
            260
                                265
                                                    270
Glu Leu Gln Trp Arg Gly Asn Phe Ala Asp Thr Trp Tyr Leu Tyr Cys
                            280
                                                 285
Gly Pro Met Val Phe Ile Cys Ala Ile Ser Leu Leu Thr Leu Val Lys
                        295
                                            300
Asn Thr Leu Asn Ala Arg Pro Leu Pro Val Leu Gly Phe Ile Ser Arg
                    310
                                        315
His Ser Leu Gly Ile Tyr Gly Phe His Ala Leu Val Ile His Ala Leu
                                    330
Arg Thr Arg Gly Val Glu Leu Lys Ser Trp Pro Val Leu Asp Ile Val
            340
                                345
Trp Ile Phe Thr Val Thr Leu Val Val Ser Leu Leu Ser Met Leu
                            360
Leu Gln Arg Ile Asp Thr Arg Arg Phe Val Ser
```

<211> 398

<212> PRT

<213> Enterobacter cloacae

<400> 9938

Gly Ala Asn Ala Met Ser Lys Ser Asn Pro Ser Asp Ile Lys Val Ala 1 5 10 15

Val Pro Thr Pro Gly Ala Phe Ala Gly Leu Lys Ser Leu Asn Leu Gln 20 25 30

Val Phe Val Met Ile Ala Ala Ile Ile Val Ile Met Leu Phe Phe Thr 35 40 45

Trp Met Thr Asp Gly Ser Tyr Leu Ser Ala Arg Asn Val Ser Asn Leu 50 55 60

Leu Arg Gln Thr Ala Ile Thr Gly Ile Leu Ala Val Gly Met Val Phe

```
70
                                        75
Val Ile Ile Ser Ala Glu Ile Asp Leu Ser Val Gly Ser Met Met Gly
               85
                                    90
Leu Leu Gly Gly Val Ala Ala Ile Phe Asp Val Trp Leu Gly Trp Pro
           100
                               105
Leu Pro Leu Thr Ile Ala Val Thr Leu Val Leu Gly Leu Leu Gly
                           120
                                                125
Ala Trp Asn Gly Trp Trp Val Ala Tyr Arg Lys Val Pro Ser Phe Ile
                       135
                                            140
Val Thr Leu Ala Gly Met Leu Ala Phe Arg Gly Ile Leu Ile Gly Ile
                    150
                                        155
Thr Asn Gly Thr Thr Val Ser Pro Thr Ser Ala Ser Met Ser Gln Ile
                                    170
Gly Gln Ser Tyr Leu Ser Asp Gly Val Gly Phe Thr Ile Gly Val Val
                                185
Gly Leu Met Ala Phe Val Ala Trp Gln Trp Arg Gly Arg Met Arg Arg
                            200
Gln Ala Leu Gly Leu Ala Ser Pro Ala Ser Thr Ser Val Val Gly Arg
                        215
                                            220
Gln Ala Leu Thr Ala Val Ile Val Leu Gly Ala Ile Trp Leu Leu Asn
                    230
                                        235
Asp Tyr Arg Gly Val Pro Thr Pro Val Leu Leu Leu Ala Leu Leu Leu
                                    250
                245
Leu Gly Gly Met Phe Met Ala Thr Arg Thr Ala Phe Gly Arg Arg Ile
            260
                                265
                                                    270
Tyr Ala Ile Gly Gly Asn Leu Glu Ala Ala Arg Leu Ser Gly Ile Asn
                            280
                                                285
Val Glu Arg Thr Lys Leu Ala Val Phe Ala Ile Asn Gly Leu Met Val
                        295
                                            300
Ala Ile Ala Gly Leu Ile Leu Ser Ser Arg Leu Gly Ala Gly Ser Pro
                                        315
                    310
Ser Ala Gly Asn Ile Ala Glu Leu Asp Ala Ile Ala Ala Cys Val Ile
                325
                                    330
Gly Gly Thr Ser Leu Ala Gly Gly Ile Gly Ser Val Ala Gly Ala Val
                                345
                                                    350
            340
Met Gly Ala Phe Ile Met Ala Ser Leu Asp Asn Gly Met Ser Met Met
                            360
                                                365
        355
Asp Val Pro Thr Phe Trp Gln Tyr Ile Val Lys Gly Ala Ile Leu Leu
                        375
                                            380
Leu Ala Val Trp Met Asp Ser Ala Thr Lys Arg Arg Ala
                    390
```

<211> 394

<212> PRT

<213> Enterobacter cloacae

<400> 9939

105

```
Leu His Leu Lys Glu Lys Gly Val His Arg Phe Ala Phe Tyr Gly Leu
                            120
                                               125
Pro Ala Thr Ser Gly Lys Arg Trp Ala Met Glu Arg Glu Tyr Ala Phe
                       135
                                            140
Cys Gln Leu Val Ala Gln Glu Lys Tyr Arg Gly Val Val Tyr Gln Gly
                   150
                                        155
Leu Glu Thr Ala Pro Glu Asn Trp Gln His Ala Gln Asn Arg Leu Ala
               165
                                    170
Asp Trp Leu Gln Thr Leu Pro Pro Gln Thr Gly Ile Ile Ala Val Thr
                                185
Asp Ala Arg Ala Arg His Val Leu Gln Val Cys Glu His Leu His Ile
                            200
Pro Val Pro Glu Lys Leu Cys Val Ile Gly Ile Asp Asn Glu Glu Leu
                        215
Thr Arg Tyr Leu Ser Arg Val Ala Leu Ser Ser Val Ala Gln Gly Thr
                    230
                                        235
Arg Gln Met Gly Tyr Gln Ala Ala Lys Leu His Arg Leu Leu Asp
                245
                                    250
Asn Glu Ser Leu Pro Leu Gln Arg Leu Leu Val Pro Pro Val Arg Val
            260
                                265
Val Glu Arg Arg Ser Thr Asp Tyr Arg Ser Leu Asn Asp Pro Ala Val
                            280
                                                285
Ile Gln Ala Met His Tyr Ile Arg Asn His Ala Cys Lys Gly Ile Lys
                        295
                                            300
Val Asp Gln Val Leu Asp Ser Val Gly Ile Ser Arg Ser Asn Leu Glu
                                        315
                    310
Lys Arg Phe Lys Glu Glu Val Gly Glu Thr Ile His Ala Val Ile His
                325
                                    330
Ala Glu Lys Leu Glu Lys Ala Arg Ser Leu Leu Ile Ser Thr Ser Leu
                                345
Ser Ile Asn Glu Ile Ser Gln Met Cys Gly Tyr Pro Ser Leu Gln Tyr
                            360
Phe Tyr Ser Val Phe Arg Lys Glu Tyr Asp Thr Thr Pro Lys Glu Tyr
                        375
                                            380
Arg Glu Arg Tyr Ser Glu Val Leu Leu
                    390
<210> 9940
<211> 466
<212> PRT
<213> Enterobacter cloacae
<400> 9940
Gly Ala Phe Thr Arg Thr Ile His His Thr Asn Thr Asn Pro Pro His
                                    10
Lys Thr Thr Asn Pro Thr Thr Ser Ala Asp Leu His Gln His Gly Ala
            20
                                25
Gly Val Met Val Thr Ala Phe His Ile Lys Pro Asp Arg Ser Pro Ala
                            40
Met Thr Phe Ser Leu Phe Gly Asp Lys Phe Thr Arg His Ser Gly Ile
                        55
Thr Arg Leu Met Glu Asp Leu Asn Asp Gly Leu Arg Thr Pro Gly Ala
                    70
Ile Met Leu Gly Gly Gly Asn Pro Ala Gln Ile Pro Glu Met Asn Thr
Tyr Phe Gln Thr Leu Leu Ala Glu Met Leu Glu Asn Gly Lys Ala Thr
                                105
Asp Ala Leu Cys Asn Tyr Asp Gly Pro Gln Gly Lys Thr Glu Leu Leu
                            120
Thr Leu Leu Ala Ala Met Leu Arg Glu Ala Leu Gly Trp Asp Ile Glu
```

140

135

```
Pro Gln Asn Ile Ala Leu Thr Asn Gly Ser Gln Ser Ala Phe Phe Tyr
                   150
                                        155
Leu Phe Asn Leu Phe Ala Gly Arg Arg Ala Asp Gly Thr Thr Lys Lys
                                    170
               165
Val Leu Phe Pro Leu Ala Pro Glu Tyr Ile Gly Tyr Ala Asp Ala Gly
           180
                                185
Leu Glu Glu Asp Leu Phe Val Ser Ala Arg Pro Asn Ile Glu Leu Leu
                            200
                                                 205
Pro Glu Gly Gln Phe Lys Tyr His Val Asp Phe Glu His Leu His Ile
                        215
                                             220
Gly Glu Glu Thr Gly Met Ile Cys Val Ser Arg Pro Thr Asn Pro Thr
                    230
                                         235
Gly Asn Val Ile Thr Asp Asp Glu Leu Met Lys Leu Asp Ala Leu Ala
                                     250
Asn Gln His Gly Ile Pro Leu Val Ile Asp Asn Ala Tyr Gly Val Pro
            260
                                265
                                                     270
Phe Pro Gly Ile Ile Phe Ser Glu Ala Arg Pro Leu Trp Asn Pro Asn
        275
                            280
                                                 285
Ile Ile Leu Cys Met Ser Leu Ser Lys Leu Gly Leu Pro Gly Ser Arg
                        295
                                             300
Cys Gly Ile Ile Ile Ala Asn Glu Lys Ile Ile Thr Ala Ile Thr Asn
                    310
                                         315
Met Asn Gly Ile Ile Ser Leu Ser Pro Gly Gly Ile Gly Pro Ala Met
                                    330
                325
Met Cys Glu Met Ile Arg Arg Asn Asp Leu Leu Arg Leu Ser Asn Glu
            340
                                345
Val Ile Lys Pro Phe Tyr Ser Gln Arg Val Gln Glu Thr Ile Ala Ile
        355
                            360
                                                 365
Leu Arg Arg Tyr Leu Pro Glu Glu Arg Cys Leu Ile His Lys Pro Glu
                        375
                                            380
Gly Ala Ile Phe Leu Trp Leu Trp Phe Lys Asp Leu Pro Ile Thr Thr
                    390
                                         395
Glu Leu Leu Tyr Gln Arg Leu Lys Lys Arg Gly Val Leu Met Val Pro
                405
                                    410
Gly Asp Tyr Phe Phe Pro Gly Leu Asp Lys Pro Trp Pro His Thr His
            420
                                425
Gln Cys Met Arg Met Asn Tyr Val Pro Asp Pro Glu Lys Ile Glu Ala
                            440
Gly Val Lys Ile Leu Ala Glu Glu Ile Glu Asn Ala Trp Arg Glu Ala
                        455
Gly
465
<210> 9941
<211> 339
<212> PRT
<213> Enterobacter cloacae
<400> 9941
Lys Asn Arg Arg Thr Gly Met Lys Val Thr Phe Glu Glu Leu Lys Ala
                                    10
Ala Phe Asn Arg Val Leu Leu Asp Arg Gly Val Lys Ala Asp Thr Ala
                                25
Asp Ala Cys Ala Glu Met Phe Ala Arg Thr Thr Glu Ser Gly Val Tyr
                                                 45
                            40
Ser His Gly Val Asn Arg Phe Pro Arg Phe Ile Gln Gln Leu Asp Ala
                        55
                                            60
Gly Asp Ile Ile Pro Asp Ala Gln Pro Lys Arg Val Thr Thr Leu Gly
                                        75
Ala Ile Glu Gln Trp Asp Ala Gln Arg Ser Ile Gly Asn Leu Thr Ala
```

85 90 Lys Lys Met Met Asp Arg Ala Thr Glu Leu Ala Ser Asp His Gly Ile 100 105 Gly Leu Val Ala Leu Arg Asn Ala Asn His Trp Met Arg Gly Gly Ser 115 120 125 Tyr Gly Trp Gln Ala Ala Glu Lys Gly Tyr Ile Gly Ile Cys Trp Thr 135 140 Asn Ser Ile Ala Val Met Pro Ala Trp Gly Ser Lys Glu Cys Cys Ile 150 155 Gly Thr Asn Pro Leu Ile Val Ala Ile Pro Ser Asn Pro Ile Thr Met 170 Val Asp Met Ser Met Ser Met Phe Ser Tyr Gly Met Leu Glu Val Asn 185 Arg Leu Ala Gly Arg Glu Leu Pro Val Asp Gly Phe Asp Asp Glu 200 Gly Asn Leu Thr Arg Glu Pro Gly Val Ile Glu Lys Asn Arg Arg Ile 215 220 Leu Pro Met Gly Tyr Trp Lys Gly Ser Gly Leu Ser Ile Val Leu Asp 230 235 Met Ile Ala Thr Leu Leu Ser Asp Gly Ala Ser Val Ala Glu Val Thr 245 250 Gln Asp Asn Ser Asp Glu Tyr Gly Val Ser Gln Ile Phe Ile Ala Val 260 265 Glu Val Asp Arg Leu Ile Asp Gly Pro Thr Arg Asp Ala Lys Leu Gln 275 280 285 Arg Ile Met Asp Phe Ile Thr Thr Ala Glu Arg Ala Asp Glu Asn Val 295 300 Ala Val Arg Leu Pro Gly His Glu Phe Thr Arg Leu Leu Glu Glu Asn 310 315 Arg Arg Asp Gly Ile Thr Ile Asp Asp Ser Val Trp Ala Lys Ile Gln 325 330 Ser Leu

<210> 9942

<211> 453

<212> PRT

<213> Enterobacter cloacae

<400> 9942

Arg Ile His Phe Pro Val Thr Phe Thr Glu Ile Leu Thr Met Asn Ile 10 Ser Ser Asn Ala Leu His Ala Asp Ile Pro Arg Gln Arg Trp Leu Arg Ile Ile Pro Pro Ile Leu Ile Ala Cys Ile Ile Ser Tyr Met Asp Arg Val Asn Ile Ala Phe Ala Met Pro Gly Gly Met Asp Glu Glu Leu Gly Ile Ser Ala Thr Met Ala Gly Leu Ala Gly Gly Ile Phe Phe Ile Gly 75 Tyr Leu Phe Leu Gln Val Pro Gly Gly Lys Ile Ala Val His Gly Ser 85 90 Gly Lys Lys Phe Ile Gly Trp Ser Leu Val Ala Trp Ala Val Ile Ser 105 110 Val Leu Thr Gly Leu Val Thr Asn Gln Tyr Gln Leu Leu Val Leu Arg 115 120 125 Phe Leu Leu Gly Val Ala Glu Gly Gly Met Leu Ser Val Val Leu Thr 140 135 Met Ile Ser Asn Trp Phe Pro Asp Ala Glu Arg Gly Arg Ala Asn Ala 155 150 Ile Val Ile Met Phe Val Pro Ile Ala Gly Ile Ile Thr Ala Pro Leu

```
170
               165
Ser Gly Trp Ile Ile Thr Ala Leu Asp Trp Arg Trp Leu Phe Ile Ile
           180
                             185
                                                   190
Glu Gly Leu Met Ser Val Val Val Leu Val Leu Trp Ala Phe Thr Val
                           200
                                               205
Tyr Asp Arg Pro Gln Glu Ala Arg Trp Ile Ser Glu Ala Glu Lys Asn
                       215
                                            220
Tyr Leu Val Gln Thr Leu Ala Ala Glu Gln Ala Ile Ala Gly Lys
                   230
                                       235
Glu Val Lys Asn Ala Ser Leu Ser Ala Val Leu Ser Asp Lys Thr Met
               245
                                   250
Trp Gln Leu Ile Ala Leu Asn Phe Phe Tyr Gln Thr Gly Ile Tyr Gly
                                265
Tyr Thr Leu Trp Leu Pro Thr Ile Leu Lys Glu Leu Thr His Thr Ser
                           280
Ile Gly Gln Val Gly Met Leu Ala Ile Leu Pro Tyr Ile Gly Ala Ile
                                .
                       295
                                           300
Ala Gly Met Phe Leu Phe Ser Ser Leu Ser Asp Arg Thr Gly Lys Arg
                   310
                                        315
Lys Leu Phe Val Ser Leu Pro Leu Ile Gly Phe Ala Leu Cys Met Phe
               325
                                    330
Leu Ser Val Ala Leu Lys Glu His Thr Trp Leu Ala Tyr Ala Ala Leu
                                345
           340
Val Gly Cys Gly Phe Phe Leu Gln Ser Ala Ala Gly Val Phe Trp Thr
                                                365
        355
                            360
Ile Pro Ala Arg Leu Phe Ser Ala Glu Met Ala Gly Gly Ala Arg Gly
                       375
                                            380
Val Ile Asn Ala Leu Gly Asn Leu Gly Gly Phe Cys Gly Pro Tyr Ala
                   390
                                        395
Val Gly Val Leu Ile Thr Leu Tyr Ser Lys Asp Ala Gly Val Tyr Cys
                                    410
Leu Ala Val Ser Leu Ala Leu Ala Ser Leu Leu Ala Leu Leu Pro
           420
                                425
Ala Lys Cys Asp Ala Gly Ala Glu Pro Asn Pro Thr Val Thr Pro His
       435
                            440
Lys Arg Ala Ala
   450
<210> 9943
<211> 307
<212> PRT
<213> Enterobacter cloacae
<400> 9943
Ser Ala Ala Gly Gly Thr Gly Ile Pro Phe Ala Asn Pro Arg His Leu
                                    10
Gly Arg Val Thr Met Arg Gln His Pro Leu Gly Ile Tyr Glu Lys Ala
           20
Leu Pro Lys Asp Leu Ser Trp Pro Glu Arg Leu Val Leu Ala Lys Ser
                            40
Cys Gly Phe Asp Phe Val Glu Met Ser Val Asp Glu Thr Asp Glu Arg
Leu Ser Arg Leu Glu Trp Ser Thr Thr Gln Arg Ala Ser Leu Val Glu
                                        75
Ala Met Leu Glu Thr Gly Val Ala Ile Pro Ser Met Cys Leu Ser Ala
His Arg Arg Phe Pro Phe Gly Ser Arg Asp Glu Ile Val Arg Glu Arg
```

105

Ala Arg Glu Ile Met Thr Lys Ala Ile Arg Leu Ala Arg Asp Leu Gly
115
120
125
Ile Arg Thr Ile Gln Leu Ala Gly Tyr Asp Val Tyr Tyr Glu Glu His

```
135
                                            140
Asp Glu Gly Thr Gln Gln Arg Phe Ala Glu Gly Leu Ala Trp Ala Val
                    150
                                       155
Glu Gln Ala Ala Ala Gln Val Met Leu Ala Val Glu Ile Met Asp
                                    170
Thr Ala Phe Met Asn Ser Ile Ser Lys Trp Lys Lys Trp Asp Asp Met
                                185
                                                    190
Leu Ala Ser Pro Trp Phe Ser Val Tyr Pro Asp Val Gly Asn Leu Ser
                            200
                                                 205
Ala Trp Gly Asn Asp Val Thr Ala Glu Leu Thr Leu Gly Ile Asp Arg
                        215
                                            220
Ile Ala Ala Ile His Leu Lys Asp Thr Arg Pro Val Thr Glu Gln Ser
                    230
Pro Gly Gln Phe Arg Asp Val Pro Phe Gly Glu Gly Cys Val Asp Phe
                245
                                    250
Val Gly Val Phe Asn Thr Leu Asn Gln Leu Asn Tyr Arg Gly Ala Phe
                                265
            260
Leu Ile Glu Met Trp Thr Glu Lys Ala Lys Glu Pro Val Leu Glu Ile
                            280
Ile Gln Ala Arg Arg Trp Ile Glu Ala Arg Met Gln Glu Gly Gly Met
                        295
    290
Thr Cys
305
<210> 9944
<211> 476
<212> PRT
<213> Enterobacter cloacae
<400> 9944
Lys Asn Arg Leu Ser Arg Ser Tyr Pro Met Thr Ser Thr Pro Ile Thr
Asp Ala Glu Val Ala Lys Gln Ala Ala Asp Glu Arg Leu Ser Val Arg
Glu Lys Ile Gly Tyr Gly Leu Gly Asp Ala Gly Gly Thr Val Ile Thr
                            40
Cys Leu Ile Met Asn Phe Leu Thr Phe Phe Tyr Thr Asp Val Phe Gly
Leu Thr Pro Ala Leu Val Gly Thr Leu Phe Ile Ala Leu Arg Val Phe
                                         75
Asp Ala Ile Ser Asp Pro Val Met Gly Val Ile Ala Asp Arg Thr Gln
                                    90
Ser Arg Trp Gly Arg Phe Arg Pro Trp Gln Leu Trp Val Ala Leu Pro
                                105
Ile Gly Ile Val Gly Val Leu Thr Phe Thr Val Pro Asp Ala Ser Met
                            120
                                                 125
Gly Val Lys Ile Ala Trp Ala Phe Gly Thr Tyr Leu Leu Leu Ser Val
                        135
Gly Tyr Thr Ala Ile Asn Val Pro Tyr Cys Ala Leu Ile Asn Thr Met
                    150
Thr Thr Arg His Asn Glu Val Ile Ser Cys Gln Ser Trp Arg Phe Val
                165
                                    170
Leu Cys Gly Val Ala Gly Phe Leu Val Ser Val Gly Leu Pro Trp Leu
                                                     190
            180
                                185
Val Ser Glu Leu Gly Gln Gly Asn Thr Ala Arg Gly Tyr Gln Leu Gly
                            200
Val Gly Val Leu Cys Ala Ile Ala Val Val Met Phe Leu Cys Cys Phe
                                             220
                        215
Phe Trp Val Arg Glu Arg Val Pro Leu Ala Leu Met Gly Lys Phe Thr
                    230
                                         235
Leu Arg Glu His Leu Ala Gly Leu Arg Lys Asn Asp Gln Leu Leu Leu
```

```
245
                                    250
Met Leu Val Met Ser Phe Leu Leu Ile Asn Val Phe Asn Ile Arg Gly
            260
                               265
Gly Gly Tyr Met Tyr Phe Ile Thr Tyr Val Leu Gln Gly Ser Thr Ala
                           280
                                                285
Tyr Thr Ser Leu Phe Phe Thr Met Val Thr Phe Ala Ala Ile Leu Gly
                       295
                                            300
Ala Val Ile Val Ser Pro Leu Ser Arg Arg Ile Asp Thr Val Lys Leu
                   310
                                        315
Tyr Tyr Tyr Thr Asn Leu Val Leu Ala Ala Leu Ala Val Gly Met Trp
                325
                                    330
Phe Leu Pro Gly Gly Pro Ala His Gln Thr Leu Trp Leu Ile Val Ile
                                345
Leu Ser Asn Gly Val Ile Leu Gly Phe Thr Leu Pro Leu His Phe Ser
                            360
Leu Met Ala Phe Ala Asp Asp Tyr Gly Glu Trp Lys Thr Gly Val Arg
                        375
                                            380
Ser Ser Gly Met Asn Phe Ala Phe Asn Leu Phe Phe Ile Lys Leu Ala
                                        395
                    390
Trp Ala Ser Ser Ala Gly Ile Ile Ser Leu Val Phe Ile Ala Val Ala
                405
                                    410
Tyr Gln Pro Gly Ala Gly Asn Gln Thr Pro Ala Ser Leu Gln Gly Ile
            420
                                425
Thr Ala Met Glu Thr Leu Leu Pro Ala Leu Phe His Leu Leu Leu Ala
                            440
Val Ala Ile Arg Trp Cys Arg Leu Asn Asn Pro Val Met Ser Arg Ile
                        455
                                            460
Ala Thr Asp Leu Arg Gln Arg His Val Gln Ser
                    470
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<211> 210

<212> PRT

<213> Enterobacter cloacae

<400> 9945

Arg Ser Cys Gly Gly Gln Arg Ile Gln Arg Asn Gln Met Met Gln Ser Pro Ala Gln Val Ser Leu Arg Pro Asn Asn Arg Leu Ser Asp Met 20 25 Gln Ala Ile Met Glu Gln Thr Gln Ala Phe Glu Asn Arg Val Leu Glu Arg Leu Asn Ala Gly Lys Thr Val Arg Ser Phe Leu Ile Ala Ala Val Glu Leu Leu Thr Glu Ala Val Asn Ile Leu Val Leu Gln Val Phe Arg Lys Asp Asp Tyr Ala Val Lys Tyr Ala Val Glu Pro Leu Leu Asp Gly Asp Gly Pro Leu Gly Asp Leu Ser Val Arg Leu Lys Leu Ile Tyr Gly 105 Leu Gly Val Leu Asn Arg Gln Glu Tyr Glu Asp Ala Glu Leu Leu Met 120 Ala Leu Arg Glu Glu Leu Asn His Asp Gly Asn Glu Tyr Thr Phe Thr 135 140 Asp Asp Glu Ile Leu Gly Pro Phe Gly Glu Leu His Cys Val Ser Ala 150 155 Leu Pro Pro Ala Pro Gln Phe Asp Asn Ser Asp Pro Glu Leu Tyr Ala 170 1.65 Met Gln Lys Leu Arg Tyr Gln Gln Val Val Arg Ser Thr Met Val Leu 185 Ser Leu Thr Glu Leu Ile Ser Lys Ile Ser Leu Lys Lys Ala Phe Gln

195 200 205 Lys 210 <210> 9946 <211> 317 <212> PRT <213> Enterobacter cloacae <220> <221>UNSURE <222>(293) <400> 9946 Tyr Phe Gln Gly Glu Gln Ser Met Ile Ile Ser Ala Ala Ser Asp Tyr 10 Arg Ala Ala Ala Gln Arg Ile Leu Pro Pro Phe Leu Phe His Tyr Ile 25 Asp Gly Gly Ala Tyr Ala Glu Tyr Thr Leu Arg Arg Asn Val Glu Asp 35 40 Leu Ser Glu Val Ala Leu Arg Gln Arg Val Leu Lys Asn Met Ser Asp 55 60 Leu Ser Leu Glu Thr Lys Leu Phe Asn Glu Thr Leu Ser Met Pro Val 70 75 Ala Leu Ala Pro Val Gly Leu Cys Gly Met Tyr Ala Arg Arg Gly Glu 8.5 90 Val Gln Ala Ala Ala Ala Asp Ala Lys Gly Ile Pro Phe Thr Leu 100 105 Ser Thr Val Ser Val Cys Pro Ile Glu Glu Val Ala Pro Thr Ile Lys 120 Arg Pro Met Trp Phe Gln Leu Tyr Val Leu Arg Asp Arg Gly Phe Met 135 140 Arg Asn Ala Leu Glu Arg Ala Lys Ala Ala Gly Cys Ser Thr Leu Val 150 155 Phe Thr Val Asp Met Pro Thr Pro Gly Ala Arg Tyr Arg Asp Ala His 165 170 175 Ser Gly Met Ser Gly Pro Asn Ala Ala Leu Arg Arg Tyr Trp Gln Ala 180 185 190 Val Thr His Pro Gln Trp Ala Trp Asp Val Gly Leu Asn Gly Arg Pro 200 His Asp Leu Gly Asn Ile Ser Ala Tyr Leu Gly Lys Pro Thr Gly Leu 215 220 Glu Asp Tyr Ile Gly Trp Leu Ala Asn Asn Phe Asp Pro Ser Ile Ser 230 235 Trp Lys Asp Leu Glu Trp Ile Arg Glu Phe Trp Asp Gly Pro Met Val 250 Ile Lys Gly Ile Leu Asp Pro Gly Arg Cys Pro Arg Arg Gly Ala Val 265 Leu Ala Pro Asn Gly Ile Val Val Ser Asn Gln Trp Gly Pro Pro Ser 280 Leu Asp Gly Gly Xaa Leu Leu Arg Pro Ala Pro Leu Arg Ala Ile Ala 295 Asp Ala Gly Glu Arg Gly Ile Leu Gly Thr Trp Ala Glu 310 <210> 9947 <211> 718 <212> PRT <213> Enterobacter cloacae <400> 9947

Leu Pro Asn Phe Ala Arg Asp His Ser Ser Leu Arg Val Leu Leu Ala 10 Glu Ser Arg Arg Gly Gly Val Phe Pro Leu Ser Arg Met Ala His Trp 25 Ser Lys Met Pro Arg Gln Glu Asn Gly Met Lys Arg Thr Ala Leu Ala 40 Val Leu Met Leu Pro Ala Phe Ala His Ala Asp Trp Ser Ser Pro Gly 55 60 Phe Asn Ala Phe Ser Ala Glu Gly Thr Gly Val Phe Thr Ser Gln Ala 75 Thr Leu Ala Lys Gly Thr Arg Pro Leu Thr Leu Ser Leu Asp Asn Ala 90 Cys Trp Gln Pro Thr Gly Ala Ile Lys Leu Asn Glu Met Leu Ser Leu 100 105 Lys Pro Cys Glu Gly Thr Pro Pro Gln Trp Arg Leu Phe Arg Asp Gly 120 Val Tyr Gln Met Arg Ile Asp Thr Arg Ser Gly Thr Pro Thr Leu Met 135 140 Leu Thr Val Gln Ser Ala Ala Pro Gln Pro Val Ala Asn Val Thr Arg 150 155 Gln Cys Pro Lys Trp Asp Gly Lys Pro Leu Thr Ile Asp Val Val Asn 165 170 Thr Phe Pro Glu Gly Thr Val Val Arg Asp Phe Tyr Ser Lys Gln Thr 190 180 185 Ala Thr Val Gln Asn Gly Lys Val Thr Leu Gln Pro Ala Ala Asn Ser 200 205 195 Asn Gly Leu Leu Leu Glu Arg Ala Glu Thr Asp Lys Pro Ala Pro 210 215 220 Phe Ser Trp Gln Asn Ala Thr Val Tyr Phe Val Leu Thr Asp Arg Phe 230 235 Val Asn Gly Asp Pro Thr Asn Asp Asn Ser Tyr Gly Arg His Lys Asp 245 250 Gly Met Gln Glu Ile Gly Thr Phe His Gly Gly Asp Leu Lys Gly Leu 265 270 Thr Ser Lys Leu Asp Tyr Leu Gln Gln Leu Gly Val Asn Ala Leu Trp 275 280 Ile Ser Ser Pro Leu Glu Gln Ile His Gly Trp Val Gly Gly Thr 295 Lys Gly Asp Phe Pro His Tyr Ala Tyr His Gly Tyr Tyr Thr Gln Asp 310 315 Trp Thr Lys Leu Asp Ala Asn Met Gly Asn Glu Asp Asp Leu Arg Gln 325 330 Leu Val Asp Asp Ala His Arg Arg Gly Ile Arg Val Leu Phe Asp Ile 345 Val Met Asn His Ala Gly Tyr Ala Thr Leu Ala Asp Met Gln Glu Tyr 360 Gln Phe Gly Ala Leu Tyr Leu Gln Gly Asp Glu Leu Lys Lys Thr Leu 375 Gly Glu Arg Trp Thr Asp Trp Lys Pro Gly Ala Gly Gln Ser Trp His 390 395 Ser Phe Asn Asp Tyr Ile Asn Phe Ser Asp Lys Ala Ala Trp Glu Lys 405 410 Trp Trp Gly Lys Lys Trp Ile Arg Thr Asp Ile Gly Asp Tyr Asp Asn 420 425 430 Pro Gly Phe Asp Asp Leu Thr Met Ser Leu Ala Phe Leu Pro Asp Leu 445 440 Lys Thr Glu Ser Lys Ile Pro Ser Gly Leu Pro Asn Phe Tyr Gln His 455 460 Lys Pro Asp Thr Asn Ala Lys Val Met Thr Asn Phe Thr Pro Arg Asp 475 470 Tyr Leu Thr His Trp Leu Ser Gln Trp Val Arg Asp Tyr Gly Ile Asp

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485
                                    490
Gly Phe Arg Val Asp Thr Ala Lys His Val Glu Pro Glu Ala Trp Leu
            500
                               505
Gln Leu Lys Asn Gln Ala Ser Gln Ala Leu Ala Ala Trp Lys Ala Ala
                            520
        515
                                                525
Asn Pro Asp Lys Lys Leu Asp Asp Ala Pro Phe Trp Met Thr Gly Glu
                        535
                                            540
Ser Trp Gly His Gly Val Met Gln Ser Asp Tyr Tyr Arg His Gly Phe
                   550
                                        555
Asp Ala Met Ile Asn Phe Asp Tyr Gln Glu Gln Ala Ala Lys Ala Val
                565
                                    570
Asp Cys Leu Ala Asp Met Asp Leu Thr Trp Gln Gln Met Ala Glu Lys
                                585
Leu Gln Ser Phe Asn Val Leu Ser Tyr Leu Ser Ser His Asp Thr Arg
                            600
Leu Phe Arg Glu Gly Gly Gln Arg Ala Ala Glu Leu Leu Leu Ala
                        615
                                            620
Pro Gly Ser Val Gln Ile Tyr Tyr Gly Asp Glu Ser Glu Arg Pro Phe
                    630
                                        635
Gly Pro Thr Gly Ser Asp Pro Leu Gln Gly Thr Arg Ser Asp Met Asn
                                    650
Trp Gln Asp Val Thr Gly Lys Gln Ala Leu Thr Val Ala His Trp Gln
                                665
            660
Leu Leu Gly Gln Phe Arg Ala Arg His Pro Ala Val Gly Glu Gly Lys
                            680
        675
                                                685
Gln Thr Thr Leu Ser Met Lys Glu Gly Tyr Gly Phe Val Arg Glu His
                        695
                                            700
Lys Gly Asp Lys Val Met Val Val Trp Ala Gly Asn Gln
                    710
<210> 9948
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 9948
Ala Gly Gly Val Tyr Ala Ala Gln Arg Val Gly Gly Thr Gly Phe Asp
                                    10
Ala Gly Gly Thr Ala Leu Ala Met Arg Ala Gln Ile Thr Phe Gln Arg
            20
                                25
Leu Asn Ala Ile Phe His Asp Pro Asn Leu His Cys Pro Glu Arg Ala
                            40
Arg His His Thr Ala Phe Ala Ala Asp Thr Ala Arg Leu Leu Asn Glu
                        55
Pro Gly Ser Arg Ser Ala Val Asn Gly Pro Arg Arg Ala Asp Ile Arg
                    70
                                        75
Ala Gly Arg Ile Phe Thr Leu Val Ala Ala His Cys Arg Gly Glu Gly
                85
                                    90
Phe Pro Leu Asn His Ala Asp Pro
            100
                                105
<210> 9949
<211> 221
<212> PRT
<213> Enterobacter cloacae
<400> 9949
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Ser Thr Val Gln Pro Ala Met Pro Asn Tyr Ser Ala Ser Trp Thr Ser 1 5 10 15

Ser Pro Pro Gln Asn Ala Leu Met Lys Met Ser Pro Ser Val Cys Leu 20 25 30

```
Asp Met Asn Leu Leu Ala Cys Trp Lys Lys Thr Ala Gly Thr Ala Ser
                            40
Pro Ser Thr Thr Ala Cys Gly Arg Lys Ser Ser Leu Cys Lys Glu Trp
                        55
                                            60
Val Met Ile Phe Gly His Ile Ala Gln Pro Asn Pro Cys Arg Leu Pro
                    70
                                        75
Leu Ala Ile Glu Lys Ala Leu Asn Phe Leu Arg Thr Thr Asp Phe Thr
                85
                                    90
Thr Leu Ala Pro Gly Val Ile Glu Ile Glu Gly Arg Asn Ile Phe Ala
            100
                                105
Gln Val Leu Asp Leu Thr Thr Lys Glu Gln His Glu Asn Arg Pro Glu
                            120
Val His Arg Arg Tyr Leu Asp Ile Gln Phe Leu Ala Trp Gly Glu Glu
                        135
Lys Ile Gly Ile Ala Ile Asp Thr Gly Asn Asn Lys Ile Ser Glu Ser
                    150
                                        155
Leu Leu Glu Gln Arg Asp Ile Ile Phe Tyr His Asp Ser Glu His Glu
                165
                                    170
Ser Phe Ile Glu Met Ile Pro Gly Ser Tyr Ala Ile Phe Phe Pro Gln
                                185
            180
                                                     190
Asp Val His Arg Pro Ala Cys Ile Lys Asn Lys Gly Ser Ala Ile Arg
                            200
Lys Ile Val Val Lys Val Ala Ile Ser Glu Leu Asp
                        215
   210
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<211> 222

<212> PRT

<213> Enterobacter cloacae

<400> 9950 Gly Val Arg Pro Met Ser Arg Pro Leu Leu Gln Leu Ala Leu Asp His 10 Thr Ser Leu Gln Ala Ala Gln Arg Asp Val Ala Thr Leu Ser Asp His 20 25 Val Asp Ile Val Glu Ala Gly Thr Ile Leu Cys Leu Thr Glu Gly Leu 35 Asn Ala Val Arg Ala Leu Arg Ala Gln Cys Pro Asp Lys Ile Ile Val Ala Asp Trp Lys Val Ala Asp Ala Gly Glu Thr Leu Ala Glu Gln Ala 75 Phe Gly Ala Gly Ala Asn Trp Met Thr Ile Ile Cys Ala Ala Pro Leu 90 Ala Thr Val Glu Arg Gly His Glu Val Ala Leu Arg Gly Gly Glu Glu 105 110 Ile Gln Met Glu Leu Phe Gly Asn Trp Thr Leu Asp Asp Ala Arg Ala 120 Trp His Arg Ile Gly Val Lys Gln Ala Ile Tyr His Arg Gly Arg Asp 135 Ala Gln Ala Ser Gly Gln Gln Trp Gly Glu Ala Asp Leu Ser Lys Met 150 Lys Ala Leu Ser Asp Ile Gly Leu Gln Leu Ser Ile Thr Gly Gly Ile 165 170 Thr Pro Ala Asp Leu Ser Leu Phe Lys Gln Ile Asn Val Lys Ala Phe 180 185 190 Ile Ala Gly Arg Ala Leu Ala Gly Ala Asp Asn Pro Pro Gln Val Ala 195 200 Gln Ala Phe His Ser Gln Ile Arg Asp Ile Trp Gly Glu 215

<211> 669 <212> PRT

<213> Enterobacter cloacae

<400> 9951 Cys Arg Ala Leu Pro Pro Ile Cys Ala Ser Val Met Tyr Ser Pro Glu 10 Glu Asn Asp Met Thr Ile Met Glu Ala Asp Leu His Gln Leu Lys Ile 25 Asn Asp Pro Phe Leu Gly Gln Tyr Gln Arg Leu Val Arg Asp Val Val 40 Ile Pro Tyr Gln Trp Asp Ala Leu Asn Asp Arg Val Ala Glu Ala Glu 55 Pro Ser His Ala Ile Ala Asn Phe Arg Ile Ala Ala Gly Leu Glu Gln 75 Gly Glu Phe Tyr Gly Met Val Phe Gln Asp Ser Asp Val Ala Lys Trp 85 90 Leu Glu Ala Val Ala Trp Ser Leu Cys Gln Lys Pro Asp Ala Glu Leu 105 100 Glu Lys Thr Ala Asp Glu Val Ile Glu Leu Val Ala Ala Ala Gln Cys 120 Glu Asp Gly Tyr Leu Asn Thr Tyr Phe Thr Val Lys Ala Pro Ala Glu 140 135 Arg Trp Thr Asn Leu Ala Glu Cys His Glu Leu Tyr Cys Ala Gly His 150 155 Met Ile Glu Ala Gly Val Ala Tyr Phe Gln Gly Thr Gly Lys Arg Arg 165 170 Leu Leu Asp Val Val Cys Arg Leu Ala Asp His Ile Asp Ser Val Phe 185 180 Gly Pro Gly Glu Asn Gln Leu His Gly Tyr Pro Gly His Pro Glu Ile 195 200 Glu Leu Ala Leu Met Arg Leu Tyr Asp Val Thr Gln Glu Pro Arg Tyr 215 220 Leu Asn Leu Val Lys Tyr Phe Ile Glu Glu Arg Gly Ala Gln Pro His 235 230 Phe Tyr Asp Ile Glu Tyr Glu Lys His Gly Arg Thr Ser Tyr Trp Asn 245 250 Thr Tyr Gly Pro Ala Trp Met Val Lys Asp Lys Ala Tyr Ser Gln Ala 260 265 His Leu Pro Leu Ala Ala Gln Gln Thr Ala Ile Gly His Ala Val Arg 280 Phe Val Tyr Leu Met Ala Gly Met Ala His Leu Ala Arg Leu Ser Asn 295 Asp Glu Gly Lys Arg Gln Asp Cys Leu Arg Leu Trp Asn Asn Met Ala Gln Arg Gln Leu Tyr Ile Thr Gly Gly Ile Gly Ser Gln Ser Ser Gly 330 Glu Ala Phe Ser Ser Asp Tyr Asp Leu Pro Asn Asp Thr Val Tyr Ala 345 Glu Ser Cys Ala Ser Ile Gly Leu Met Met Phe Ala Arg Arg Met Leu 360 365 Glu Met Glu Ala Asp Gly His Tyr Ala Asp Val Met Glu Arg Ala Leu 375 380 Tyr Asn Thr Val Leu Gly Gly Met Ala Leu Asp Gly Lys His Phe Phe 395 390 Tyr Val Asn Pro Leu Glu Val His Pro Lys Thr Leu Ser Phe Asn His 405 410 Ile Tyr Asp His Val Lys Pro Val Arg Gln Arg Trp Phe Gly Cys Ala 425 430 Cys Cys Pro Pro Asn Ile Ala Arg Val Leu Thr Ser Leu Gly His Tyr

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Ile Tyr Thr Val Arg Pro Asp Ala Leu Leu Ile Asn Leu Tyr Val Gly
                       455
                                            460
Asn Asp Val Ala Ile Pro Val Gly Asp Asn Ile Leu Gln Leu Arg Ile
                    470
                                        475
Ser Gly Asn Tyr Pro Trp His Glu Gln Val Lys Ile Glu Ile Thr Ser
                485
                                    490
Pro Val Pro Val Thr His Thr Leu Ala Leu Arg Leu Pro Asp Trp Cys
            500
                                505
Ala Glu Pro Ala Val Ser Leu Asn Gly Gln Ala Ile Thr Gly Glu Val
                            520
Ser Arg Gly Tyr Leu Tyr Leu Asn Arg Ser Trp Gln Glu Gly Asp Thr
                        535
Leu Thr Leu Thr Leu Pro Met Pro Val Arg Arg Val Tyr Gly Asn Pro
                    550
                                        555
Gln Val Arg Gln Gln Ala Gly Lys Val Ala Leu Gln Arg Gly Pro Leu
                565
                                    570
Ile Tyr Cys Leu Glu Glu Ala Asp Asn Gly Ala Asn Leu His Asn Leu
                                585
Ser Leu Arg Gln Asp Ser Ala Phe Arg Val Phe Glu Gly Lys Gly Ile
        595
                            600
                                                605
Phe Ala His Lys Met Leu Ile Gln Ala Glu Gly Ile Gly Cys Gln Ala
                        615
                                            620
Lys Asp Thr Asp Ala Leu Trp Gln Tyr Asp His Ser Pro Val Glu Arg
                    630
                                        635
Gln Pro Arg Thr Leu Thr Phe Ile Pro Trp Phe Ser Trp Ala Asn Arg
                                    650
                645
Gly Glu Gly Glu Met Arg Ile Trp Val Asp Glu Ser
            660
                                665
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<210> 9952 <211> 164

<212> PRT

<213> Enterobacter cloacae

<400> 9952

Met Asp Ser Cys Thr Ser Ala Arg Leu Gly Gln Val Gln Thr Ser Pro 10 Trp Leu Asn Ala Asn Ser Ala Asn Pro Ser Ser Ala Leu Ser Lys Lys 20 Ala Ser Ser Ser Ile Thr Ser Ala Lys Lys Met Phe Gly Asp Leu Pro Pro Ser Ser Val Thr Gly Met Met Phe Trp Val Ala Tyr Cys 60 Met Ile Cys Trp Pro Thr Ser Val Glu Pro Val Asn Ala Thr Leu Ala 70 75 Ile Arg Phe Glu Val Ala Arg Tyr Ser Pro Ile Ser Pro Pro Ala Pro 90 Leu Thr Thr Leu Met Thr Pro Gly Gly Asn Arg Ser Pro Ile Thr Ser 105 Ile Ser Ser Ser Thr Glu Ser Gly Val Lys Arg Ala Gly Phe Ser Thr 120 125 Thr Gln Leu Pro Ala Ala Ser Ala Gly Ala Ile Phe Gln Leu Ala Ile 135 140 Ser Ser Gly Lys Phe His Gly Ile Ile Cys Pro Thr Thr Pro Ser Gly 150 155 Ser Trp Lys

<210> 9953

<211> 344

<212> PRT

### <213> Enterobacter cloacae

<400> 9953 Val Tyr Asn Lys Gly Ser Ser Gly Trp Trp Phe Ser Arg Gln Ser Val 10 Thr Gly Leu Arg Ala Val Ser Arg Ile Thr Val Leu Tyr Val Ser Phe 25 Leu Pro Pro Glu Pro Tyr Leu Ile Ala Gln Gly Leu Met Arg Asn Asp Ala Met Gln Leu Phe Ile Gly Phe Asp Val Gly Gly Thr His Ile Lys 55 His Gly Val Ile Asn Glu Asn Gly Glu Glu Leu Thr Ser Asp Glu Tyr 70 75 Asp Thr Pro Asp Asp Glu Ser Thr Phe Lys Gln Lys Trp Lys Ala Val 85 90 Val Asp Lys Tyr Arg Gln Glu His Glu Ile Val Gly Ile Gly Val Ser 100 105 Phe Pro Gly His Ile Asn His His Thr Gly Glu Ala Ala Lys Ala Gly 120 Ala Leu Asp Tyr Leu Asp Gly Glu Asn Leu Cys Glu Leu Phe Ala Gln 135 140 Leu Thr Asp Leu Pro Val Thr Thr Glu Asn Asp Ala Asn Cys Ala Ala 150 155 Leu Gly Glu Arg Trp Gln Gly Ala Gly Lys Asp Tyr Glu His Phe Val 170 Cys Ile Thr Ile Gly Thr Gly Ile Gly Gly Ile Val Met Glu Gly 185 Asp Leu Tyr Arg Gly Ser His Tyr Arg Ala Gly Glu Phe Gly Val Leu 200 Pro Val Gly Asn Asn Gly Glu Pro Met His Glu Val Ala Ser Ala Ser 215 220 Gly Leu Met Lys Ala Cys Arg Arg Ala Leu Ala Val Ser Glu Asp Glu 230 235 Met Pro Asp Gly Glu Glu Leu Phe Arg Arg Met Asp Ser Asp Val His 250 Leu Arg Glu Ala Ile Glu Glu Trp Ala His Phe Leu Ser Arg Gly Ile Tyr Ser Val Ile Ser Met Phe Asp Pro Gln Ala Val Leu Ile Gly Gly 280 Gly Ile Ser Glu Gln Glu Lys Ile Tyr Leu Leu Leu Asp Lys Tyr Leu 295 Gln Arg Phe Glu Glu Trp Glu Ala Leu Arg Val Pro Ile Leu Pro Cys 310 -315 Glu Leu Gly Asn Gln Ala Gly Arg Leu Gly Ala Val Trp Leu Ala Lys 325 330 Gln Lys Gln Ala Arg Ser Ala 340

<210> 9954

<211> 419

<212> PRT

<213> Enterobacter cloacae

<400> 9954

Gin Ile Thr Val Leu Leu Pro Leu Pro Pro Gly Glu Arg Ala Arg Val
1 5 10 15

Arg Gly Lys Arg Ser Ser Pro Gln Pro Ser Arg Val Lys Thr Leu Met
20 25 30

Lys Val Asn Thr Met Lys Ala Leu His Phe Gly Ala Gly Asn Ile Gly
35 40 45

Arg Gly Phe Ile Gly Lys Leu Leu Ala Asp Ala Gly Ile Thr Leu Thr

```
60
                        55
Phe Ala Asp Val Asn Gln Val Val Leu Asp Ala Leu Asn Ala Arg His
                    70
                                        75
Ser Tyr Gln Val His Val Val Gly Glu Asn Glu Gln Val Glu Thr Val
                85
                                    90
Ser Gly Val Asn Ala Val Ser Ser Ile Gly Asp Asp Val Ile Asp Leu
            100
                                105
Ile Ala Ser Val Asp Leu Val Thr Thr Ala Val Gly Pro Val Val Leu
                            120
                                                125
Glu Arg Ile Ala Pro Ala Val Ala Lys Gly Leu Ala Lys Arg Lys Ala
                        135
Gln Gly Val Glu Thr Pro Leu Asn Ile Ile Ala Cys Glu Asn Met Val
                                        155
                    150
Arg Gly Thr Thr Gln Leu Lys Gly His Val Leu Thr Ala Val Ala Asp
                                    170
Glu Asp Lys Ala Trp Val Glu Ala His Val Gly Phe Val Asp Ser Ala
                                185
Val Asp Arg Ile Val Pro Pro Ser Ala Ser Ala Thr Asn Asp Pro Leu
                            200
Glu Val Thr Val Glu Thr Phe Ser Glu Trp Ile Val Asp Lys Thr Gln
                        215
                                             220
Phe Lys Gly Ala Leu Pro Thr Ile Pro Gly Met Glu Leu Thr Asp Asn
                                        235
                    230
Leu Met Ala Phe Val Glu Arg Lys Leu Phe Thr Leu Asn Thr Gly His
                245
                                    250
Ala Ile Thr Ala Tyr Leu Gly Lys Leu Ala Gly His Gln Thr Ile Arg
            260
                                265
Asp Ala Ile Leu Asp Glu Asn Ile Arg Ala Val Lys Gly Ala Met
                            280
                                                 285
Glu Glu Ser Gly Ala Val Leu Ile Lys Arg Tyr Gly Phe Asp Ala Asp
                        295
                                            300
Lys His Ala Ala Tyr Ile Gln Lys Ile Leu Gly Arg Phe Glu Asn Pro
                    310
                                        315
Tyr Leu Lys Asp Asp Val Glu Arg Val Gly Arg Gln Pro Leu Arg Lys
                                    330
                325
Leu Ser Ala Gly Asp Arg Leu Ile Lys Pro Leu Leu Gly Thr Leu Glu
                                345
            340
Tyr Gly Leu Pro His Ala Asn Leu Val Lys Gly Ile Ala Ala Ala Met
        355
                            360
His Tyr Arg Ser Glu Gln Asp Pro Gln Ala Ile Glu Leu Ala Gln Leu
                        375
    370
                                             380
Ile Asp Asp Lys Gly Ala Gln Ala Ala Leu Ala Gln Ile Ser Gly Leu
                    390
                                         395
Asp Ala Asn Ser Asp Val Val Ala Glu Ala Val Ser Ala Tyr Asn Ala
                405
                                    410
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<210> 9955

Thr Lys

<211> 147

<212> PRT

<213> Enterobacter cloacae

<400> 9955

```
55
Glu Lys Glu Ser Val Lys Leu Glu Ala Glu Ile Glu Arg Leu Arg Glu
                   70
                                        75
Val Lys Gly Gln Lys Leu Ser Lys Glu Ala Gln Lys Leu Met Asn Met
                                    90
               85
Pro His Arg Arg Ala Ile Thr Lys Lys Glu Gln Ala Asp Met Gly Lys
                               105
            100
Leu Lys Lys Ser Val Arg Gly Leu Val Val Val His Pro Met Thr Glu
                           120
Leu Gly Arg Glu Met Gly Leu Lys Glu Met Thr Gly Phe Cys Lys Thr
                        135
Ala Phe
145
<210> 9956
<211> 283
<212> PRT
<213> Enterobacter cloacae
<400> 9956
Thr Gln Pro Asp Ile Tyr Leu His Gly Gly Arg Asp His His Ile Ala
                                    10
Gly Leu Cys Leu Asn Leu Asp Asp Ser Met Ile Val Met Pro Arg Arg
            20
                                25
Leu Ser Glu Glu Ile Ala Thr Arg Val Arg Ala Leu Ile Glu Glu Gln
                            40
Gln Leu Glu Ala Gly Met Arg Leu Pro Ala Glu Arg Gln Leu Ala Ala
                        55
Gln Leu Gly Val Ser Arg Asn Ser Leu Arg Glu Ala Leu Ala Thr Leu
                    70
                                        75
                        .
Val Ser Glu Gly Val Leu Leu Ser Arg Arg Gly Gly Gly Thr Phe Val
                                    90
                8.5
Arg Trp Gln His Asp Asp Trp Ser Glu Gln Asn Ile Val Gln Pro Leu
            100
                                105 .
Lys Thr Leu Met Glu Asn Asp Pro Asp Tyr Ser Phe Asp Ile Leu Glu
                            120
                                                125
        115
Ala Arg His Ala Ile Glu Thr Ser Thr Ala Trp His Ala Ala Met Arg
                        135
                                            140
Ala Thr Asp Ala Asp Lys Glu Lys Leu Lys Ala Cys Phe Glu Ala Thr
                    150
                                        155
Gln Ser Ser Asp Pro Asp Ile Ala Ser Gln Ala Asp Val Arg Phe His
                165
                                    170
Leu Ala Ile Ala Glu Ala Ser His Asn Val Val Leu Leu Gln Thr Met
            180
                                185
Arg Gly Phe Phe Asp Leu Leu Gln Ser Ser Val Lys Gln Ser Arg Gln
                            200
Arg Met Tyr Leu Val Pro Pro Val Phe Ala Gln Leu Thr Glu Gln His
                        215
Glu Ala Val Leu Asn Ala Ile Leu Ala Gly Asp Ala Glu Ala Ala Arg
                                        235
Lys Ala Met Met Ala His Leu Gly Phe Val His Thr Thr Ile Lys Arg
                245
                                    250
Phe Asp Glu Asp Gln Ala Arg Gln Ala Arg Ile Thr Arg Leu Pro Gly
                                265
           260
Glu Ser Asp Ile Ser Arg Glu Asn Lys Ala
       275
<210> 9957
<211> 275
<212> PRT
<213> Enterobacter cloacae
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<211> 297 <212> PRT

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<400> 9957
Ile Ser Met Leu Glu Leu Ser Ile Ala Leu Pro Ile Arg Val Gln Asn
                                    10
Gly Gly Leu Phe Ile Ser Arg Gly Val Gly Arg His Pro Ala Arg Lys
            20.
                                25
Leu Ser Ser Trp Glu Ile Ile Phe Val Glu Lys Gly Thr Leu Thr Ile
                            40
Gln Glu Glu Asn Thr Leu Phe Glu Val Asn Ala Gly Glu Ser Leu Leu
                        55
Leu Trp Pro Lys Arg Arg His Val Gly Val Glu Asp Phe Pro Gly Asp
                    70
                                        75
Leu Lys Phe Tyr Trp Leu His Phe Glu Val Asp Glu Arg Leu Pro Val
                                    90
Leu Pro Gly Ala Thr Pro Leu Ser Ile Glu Gln His Cys Ser Val Arg
                                105
Asp Pro Gln Tyr Val Ile Ala Leu Phe Arg Gln Phe Leu Ser Glu Gln
                            120
Glu Lys Leu Gln Arg Ser Gln Ala Leu Glu Ile Ile Leu Leu Ile
                        135
                                            140
Leu Gln Gln Ile Ser Leu Ser Pro Gly Tyr Glu Asp Lys Ala Asp Asp
                    150
                                        155
Ala Gly Ala Ala Met Ala Trp Lys Ala Lys Gln Leu Ile Arg Thr His
                165
                                    170
Phe His Leu Pro Leu Ser Thr Ser Gln Leu Ala Lys Glu Leu His Cys
                                185
            180
Asn Ala Asp Tyr Leu Gly Arg Val Phe Arg Arg Thr Phe His Leu Thr
                            200
        195
                                                 205
Leu Thr Glu Ala Ile His Arg Gln Arg Val Arg Ala Ala Glu Lys Leu
                        215
                                            220
Leu Leu Asn Asp Ala Ala Ser Leu Thr Glu Val Ala Ala Arg Cys Gly
                    230
                                        235
Phe Asn Asp Val Gly Tyr Phe Arg Gln Ile Phe Ser Lys His Thr Gly
                245
                                    250
Leu Thr Pro Ala Val Trp Lys Arg Arg Tyr Cys Lys Glu His Ile Asn
            260
                                265
Ser Gly
        275
<210> 9958
<211> 89
<212> PRT
<213> Enterobacter cloacae
<400> 9958
Asn Gly Leu Ile Thr Ser Phe Asp Arg Arg Ser Arg Ser Leu Arg Leu
                                    10
Ile Ile Ser His Ile Ile Ala Gly Pro Met Pro Pro Gly Glu Arg Leu
Ile Met Pro Phe Met Leu Val Met Ala Val Met Ile Phe Ser Leu Ala
                            40
Met Ile Met Pro Gln Arg Leu Pro Gly Arg Pro Ser Leu Glu Arg Leu
                        55
Met Gln Arg Met Ile Phe Gly Phe His Ser Gly Arg Ala Ser Leu Lys
                                        75
                    70
Met Ile Pro Gly Asn Gly Thr Pro
<210> 9959
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## <213> Enterobacter cloacae

<400> 9959 Asp Ser Ala Leu Lys Phe Leu Lys Lys Ile Arg Cys Trp Asn Val Tyr 10 Ile Arg Pro Gly Asp Leu Met Ile Ser Thr Pro Ile Arg Arg Tyr Gly 20 25 Ala Ala Ile Leu Met Leu Leu Thr Met Ala Phe Ser Gly Glu Val Leu 40 Ala Lys Thr His Thr Asp Thr Thr Ser Lys Lys Ala His Val Ile Lys 55 Thr Thr Ser Ser Lys Val Ser Ser Lys Gln Glu Tyr Ser Arg Asn Ser 70 75 Ala Lys Ser Ser Leu Pro Asp Leu Arg Lys Tyr Pro Ser Gly Thr 90 Pro Arg Lys Lys Ala Phe Leu Arg Thr Val Met Pro Tyr Ile Lys Ser 105 Gln Asn Ala Ala Ile Thr Ala Asp Arg Asn Trp Leu Ile Ser Lys Gln 120 Tyr Asp Ser Arg Trp Ser Pro Ser Glu Arg Thr Arg Leu Lys Asp Ile 135 140 Ala Lys Arg Tyr Lys Val Lys Trp Ser Gly Asn Thr Arg Arg Val Pro 155 150 Trp Asn Ser Leu Leu Glu Arg Val Asp Ile Ile Pro Gly Ser Met Val 170 165 Ala Thr Met Ala Ala Ala Glu Ser Gly Trp Gly Thr Ser Lys Leu Ala 180 185 Arg Asn Asn Asn Leu Phe Gly Met Lys Cys Val Lys Gly Arg Cys 200 Thr Asn Ala Pro Gly Lys Val Lys Gly Tyr Ser Gln Phe Glu Ser Val 215 220 Lys Asp Ser Val Asn Ala Tyr Val Val Asn Leu Asn Thr His Pro Ala 230 235 Tyr Ser Ser Phe Arg Lys Ser Arg Ala Gln Leu Arg Lys Ala Asp Gln 250 245 Glu Val Thr Ala Thr Ala Met Ile His Lys Leu Lys Gly Tyr Ser Thr 265 270 260 Gln Gly Gln Arg Tyr Asn Asn Tyr Leu Phe Ser Met Tyr Gln Asp Asn 280 275 Gln Arg Leu Ile Ala Ala His Met 290

<210> 9960

<211> 215

<212> PRT

<213> Enterobacter cloacae

## <400> 9960

100 105 Tyr Gly Gly Ile Leu Leu Gly Thr Gly Gly Leu Val Lys Ala Tyr Gly 120 125 Gly Gly Val Gln Gln Ala Leu Asn Leu Leu Ile Thr Thr Arg Lys Thr 135 140 Pro Leu Thr Glu Tyr Thr Leu Leu Cys Asp Tyr Ala Gln Leu Ser Gly 150 155 Ile Glu Ala Leu Leu Lys Gln Phe Asn Gly Val Ile Ala Gln Ser Asp 170 165 Tyr Gln Ala Met Val Gln Leu Arg Val Ala Leu Pro Gln Ala Glu Leu 180 185 Ala Ala Phe Ser Ala Lys Leu Ala Asp Phe Ser Arg Gly Ser Leu Gln 200 Leu Leu Pro Ile Glu Glu 215 <210> 9961 <211> 221 <212> PRT <213> Enterobacter cloacae <400> 9961 Ser Pro Ile Cys Cys Leu Gly Val Leu Arg Ser Leu Arg Cys Trp Cys Cys Leu Pro Gln His Ser Gly Val Ser Lys Glu Thr Leu Val Lys Thr 25 Leu Ile Leu Phe Ser Thr Arg Asp Gly Gln Thr Arg Glu Ile Ala Ser 40 Tyr Leu Ala Ser Glu Leu Lys Glu Leu Gly Ile Tyr Ser Asp Val Val 55 Asn Leu Asn Arg Thr Glu Gln Ile Ala Trp Gln Asp Tyr Asp Arg Val 70 75 Val Ile Gly Ala Ser Ile Arg Tyr Gly His Phe His Pro Ala Leu Asp 90 Arg Phe Val Lys Lys His Thr Ala Glu Leu Ala Gln Leu Pro Gly Ala 100 105 Phe Tyr Ser Val Asn Leu Val Ala Arg Lys Ala Glu Lys Arg Thr Pro 120 Gln Thr Asn Ser Tyr Thr Arg Lys Phe Leu Leu Ser Ser Pro Trp Gln 135 140 Pro Asp Ile Cys Ser Val Phe Ala Gly Ala Leu Arg Tyr Pro Arg Tyr 150 155 Arg Trp Tyr Asp Arg Phe Met Ile Arg Leu Ile Met Lys Met Thr Gly 165 . 170 Gly Glu Thr Asp Thr Arg Lys Glu Val Val Tyr Thr Asp Trp Ala Gln 190 180 185 Val Ala Ser Phe Ala Arg Glu Ile Ala His Leu Thr Asp Asp Ala Arg 200 Val Val Phe Thr Arg Val Pro Val Pro Arg Tyr Val Lys 210 215 <210> 9962 <211> 202 <212> PRT <213> Enterobacter cloacae <400> 9962 Phe Thr Glu Gly Lys Val Phe Gln Met Lys Ile Lys Asn Val Ala Leu 10 Ala Ile Ala Ala Ala Gly Leu Leu Ser Ser Gln Ser Val Leu Ala

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Ser Ser Asp Ser Gly Val Asn Ala Ser Leu Asp Thr Gly Ala Gly Ser
                            40
Gln Ser Thr Gly Gly Val Ile Asn Phe Thr Gly Lys Ile Thr Leu Ile
                        55
                                            60
Ser Cys Asp Ile Thr Pro Ala Ser Lys Asn Lys Thr Val Asp Leu Gly
                    70
                                        75
Ala Trp Ala Lys Ser Tyr Phe Asp Asp His Asn Glu Thr Thr Pro Arg
                85
                                    90
Glu Phe Lys Ile Asn Val Glu Asn Cys Pro Glu Thr Val Glu Ser Val
            100
                                105
Ala Val Leu Phe Asp Gly Thr Lys Asp Thr Val Asn Asp Thr Leu Leu
                            120
                                                125
Gln Val Thr Pro Cys Glu Gly Met Ala Thr Gly Val Arg Val Lys Leu
                        135
                                            140
Tyr Asn Ser Asp Arg Ser Thr Ala Ile Lys Pro Gly Thr Val Ser Glu
                    150
                                        155
Thr Thr Ala Pro Asp Asp Glu Gly Asn Ala Glu Leu Thr Phe Tyr Ala
                165
                                    170
Ala Leu Asp Lys Asp Gly Thr Glu Ile Tyr Ala Gly Asp Val Asn Ala
            180
                                185
Val Ser Asn Phe Leu Met Val Tyr Asn
                            200
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<210> 9963 <211> 235

<211> 233

<213> Enterobacter cloacae

<400> 9963

Phe His Cys Gln Pro Pro Pro Glu Ile Ile Met Met Lys Arg Leu Ser 10 Tyr Ile Met Leu Thr Ala Leu Met Val Ser Ser Ala Ser Val Ser Ala 20 25 Gly Val Val Met Gly Gly Thr Arg Ile Val Tyr Pro Gln His Ser Lys 40 45 Glu Val Ala Phe Ser Val Ser Asn Met Glu Ser Ala Val Pro Tyr Leu 55 Ile Gln Ser Trp Val Glu Gly Asp Gly Gln Gly Lys Asn Asn Ala Ala 70 Pro Phe Ile Val Thr Pro Pro Leu Phe Arg Leu Asp Pro Glu Gln Thr 85 90 Asn Thr Leu Arg Ile Gln Tyr Thr Gly Ala Pro Leu Pro Thr Asp Arg 100 105 Glu Ser Val Phe Trp Leu Asp Ile Lys Ala Ile Ala Pro Lys Pro Lys 120 Glu Ser Ser Asn Glu Leu Gln Val Asn Val Lys Ser Lys Phe Lys Ile 135 Phe Tyr Arg Pro Asp Asn Leu Lys Gly Asp Ala Ala Thr Ala Trp Gln 150 155 Lys Ile Thr Phe Ser Arg Thr Gly Lys Gly Leu Lys Ala Ala Asn Pro 165 170 Thr Pro Tyr Tyr Val Ser Phe Tyr Arg Leu Thr Val Gly Gly His Lys 180 185 190 Ile Glu Gln Pro Gly Met Ile Gly Pro Gly Glu Thr Arg Glu Trp Pro 205 200 Val Ser Ala Ser Gly Gly Val Ser Trp Ser Ala Ile Asn Asp Phe Gly 215 220 Ala Ile Thr Ala Thr His Thr Gln Pro Leu 235 230

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<211> 204
<212> PRT
<213> Enterobacter cloacae
<400> 9964
Ala Met Lys Leu Ile Gly Ser Tyr Thr Ser Pro Phe Val Arg Lys Ile
Ser Ile Leu Leu Glu Lys Gly Ile Glu Phe Glu Phe Val Asn Glu
Gln Pro Tyr Asn Ala Glu Asn Gly Val Ala Gln Tyr Asn Pro Leu Gly
                            40
Lys Val Pro Ala Leu Val Thr Asp Glu Gly Asp Tyr Trp Phe Asp Ser
                        55
Pro Ile Ile Ala Glu Tyr Ile Glu Leu Leu Gly Val Ala Pro Ala Met
                    70
                                        75
Leu Pro Ala Asp Pro Lys Ala Ala Leu Ala Met Lys Gln Ile Glu Ala
                                    90
Leu Ala Asp Gly Ile Met Asp Ala Ala Leu Thr Ser Val Arg Glu Gln
            100
                                105
Ala Arg Pro Ala Ala Gln Gln Ser Glu Asn Glu Leu Leu Arg Gln Arg
                            120
Glu Lys Ile Ser Arg Ser Leu Asp Met Cys Glu Gln Leu Ile Arg Asp
                        135
                                            140
Gly Lys Ile Gln Ser Asp Ser Leu Asn Leu Ala Thr Ile Ala Ile Ala
                    150
                                        155
Cys Ala Ile Gly Tyr Leu Asn Phe Arg Arg Val Ser Pro Gly Trp Cys
                                    170
                165
Val Asp Arg Pro Leu Leu Val Lys Leu Ala Glu Thr Leu Phe Gln Arg
                                185
            180
Glu Ser Phe Ala Arg Thr Glu Pro Pro Lys Ala
<210> 9965
<211> 622
<212> PRT
<213> Enterobacter cloacae
<400> 9965
Ser Ala Val Ser Gly Asp Asp Val Glu Met Ile Ile Ala Thr Ala Gly
                                    10
His Val Asp His Gly Lys Thr Thr Leu Leu Gln Ala Ile Thr Gly Val
Asn Ala Asp Arg Leu Pro Glu Glu Lys Lys Arg Gly Met Thr Ile Asp
Leu Gly Tyr Ala Tyr Trp Pro Gln Pro Asp Gly Arg Val Leu Gly Phe
Ile Asp Val Pro Gly His Glu Lys Phe Leu Ser Asn Met Leu Ala Gly
Val Gly Gly Ile Asp His Ala Leu Leu Val Val Ala Cys Asp Asp Gly
Val Met Ala Gln Thr Arg Glu His Leu Ala Ile Leu Gln Leu Thr Gly
                                105
Asn Pro Gln Leu Thr Val Ala Leu Thr Lys Ala Asp Arg Val Asp Glu
                            120
                                                125
Ala Arg Ile Asp Glu Val Arg Gln Glu Val Leu Ala Ala Leu Ser Glu
                        135
                                            140
Tyr Gly Phe Lys Asp Val Ala Leu Phe Val Thr Val Ala Thr Glu Gly
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Arg Gly Ile Asp Ala Leu Arg Asn His Leu Gln Gln Ile Pro Ser Arg

Glu Gln Ala Ser His His Arg Phe Arg Leu Ala Ile Asp Arg Ala Phe

155

180 185 Thr Val Lys Gly Ala Gly Leu Val Val Thr Gly Thr Ala Leu Ser Gly 200 205 Glu Val Asn Val Gly Asp Thr Leu Trp Leu Thr Gly Val Asn Lys Pro 215 220 Met Arg Val Arg Gly Leu His Ala Gln Asn Gln Pro Val Glu Gln Ala 230 235 His Ala Gly Gln Arg Ile Ala Leu Asn Val Ala Gly Asp Ala Glu Lys 245 250 Asp Gln Leu Asn Arg Gly Asp Trp Leu Leu Ala Asp Ala Pro Pro Glu 265 Pro Ser Glu Arg Val Ile Val Ser Leu Gln Thr His Thr Pro Leu Thr 280 Gln Trp Gln Pro Leu His Ile His His Ala Ala Ser His Ile Thr Gly 295 Arg Val Ser Leu Leu Glu Asn Asp Leu Ala Glu Leu Val Phe Asp Ser 310 315 Pro Leu Trp Leu Ala Asp Asn Asp Arg Leu Val Leu Arg Asp Ile Ser 330 325 Ala Arg Glu Thr Leu Ala Gly Ala Arg Val Val Met Leu Asp Pro Pro 345 350 340 Arg Arg Gly Lys Arg Lys Pro Glu Tyr Leu Gln Trp Leu Ala Ala Leu 365 355 360 Ala Gln Thr Arg Asp Asp Lys Ser Ala Leu Asp Ile His Leu Glu Arg 375 380 370 Gly Ala Val Asp Leu Ala Ala Phe Ala Trp Ala Arg Gln Leu Ser Gly 390 395 Glu Gly Leu Arg Leu Leu Thr Gln Glu Pro Gly Phe Ile Gln Ala Gly 405 410 Asn Ser Leu Leu Asn Ala Pro Val Ala Ala Arg Trp Gln Arg Lys Val 420 425 430 Leu Ser Thr Leu Ala Thr Tyr His Glu Gln His Gln Asp Glu Pro Gly 440 445 Pro Gly Arg Glu Arg Leu Arg Met Ala Leu Pro Met Glu Asp Asp 455 450 460 Ala Leu Val Leu Leu Ile Glu Asn Met Arg Glu Ser Gly Val Ile 475 470 Ala Ser His His Gly Trp Leu His Leu Pro Glu His Lys Ala Gly Phe 485 490 Thr Ala Glu Gln Asp Ala Val Trp Gln Lys Val Ala Ala Leu Phe Gly 500 505 Asp Glu Pro Trp Trp Val Arg Asp Leu Ala Arg Glu Thr Asn Thr Asp 520 Glu Gln Leu Met Arg Gln Val Leu Arg His Ala Ala Gln Gln Gly Met 535 Ile Val Ala Ile Val Lys Asp Arg Tyr Tyr Arg Asn Asp Arg Ile Val 550 555 Ala Phe Ala Asn Leu Ile Arg Glu Leu Asp Gln Ala Arg Gly Ser Thr 570 Cys Ala Ala Asp Phe Arg Asp Arg Leu Asn Val Gly Arg Lys Leu Ala 585 Ile Gln Ile Leu Glu Tyr Phe Asn Arg Ile Gly Phe Thr Arg Arg Arg 600 Gly Asn Asp His Val Leu Arg Asp Ala Gln Leu Phe Pro 615

<sup>&</sup>lt;210> 9966

<sup>&</sup>lt;211> 293

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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<400> 9966
Asp Arg Glu Leu Lys His Thr Leu Arg Tyr His Gln Gly Ala Ile Asn
                                    10
Arg Ser Tyr Leu Met Ser Ile Lys Glu Ser Glu Met Thr Gln Glu Lys
            20
                                25
Glu Arg Pro Ala Gly Ser Gln Ser Leu Phe Arg Gly Leu Met Leu Ile
                            40 ·
                                                45
Glu Ile Leu Ser Asn Tyr Pro Asn Gly Cys Pro Leu Ala His Leu Ser
                        55
Glu Leu Ala Gly Leu Asn Lys Ser Thr Val His Arg Leu Leu Gln Gly
                    70
                                        75
Leu Gln Ser Cys Gly Tyr Val Thr Pro Ala Pro Ala Ala Gly Ser Tyr
                                    90
                85
Arg Leu Thr Thr Lys Phe Ile Ala Val Gly Gln Lys Ala Leu Ser Ser
                                105
Leu Asn Ile Ile His Val Ala Ala Pro His Leu Glu Ala Leu Asn Ile
                            120
Ala Thr Gly Glu Thr Val Asn Phe Ser Ser Arg Glu Asp Asp His Ala
                        135
                                            140
Ile Leu Ile Tyr Lys Leu Glu Pro Thr Thr Gly Met Leu Arg Thr Arg
                    150
                                        155
Ala Tyr Ile Gly Gln His Met Pro Leu Tyr Cys Ser Ala Met Gly Lys
                                    170
                165
                                                         175
Ile Tyr Met Ala Phe Gly His Gln Asp Tyr Val Ala Ser Tyr Trp Glu
            180
                                185
Ser His Gln Glu Gln Ile Gln Pro Leu Thr Arg Asn Thr Ile Thr Glu
                            200
                                                 205
Leu Ser Ala Met Tyr Asp Glu Leu Ala Glu Ile Arg Asp His Ser Met
                        215
                                            220
Ala Met Asp Lys Glu Glu Asn Glu Leu Gly Val Ser Cys Ile Ala Val
                                        235
                    230
Pro Val Phe Asp Ile His Gly Arg Val Pro Tyr Ala Ile Ser Ile Ser
                245
                                    250
Leu Ser Thr Ser Arg Met Lys Gln Val Gly Glu Lys Asn Leu Leu Lys
            260
                                265
Pro Leu Arg Asp Thr Ala Glu Ala Ile Ser Lys Glu Leu Gly Phe Asn
        275
                            280
Val Arg Glu Ala
    290
<210> 9967
<211> 153
<212> PRT
<213> Enterobacter cloacae
<400> 9967
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120 125 Ala Cys Pro Thr His Ala Leu Arg Cys Ile Asp Pro Ala Ser Leu Arg 135 Ala Glu Arg Leu Arg Asn Met Ala 150 <210> 9968 <211> 506 <212> PRT <213> Enterobacter cloacae <400> 9968 Ile Thr Ala Phe Met Pro Gly Lys Arg Cys Ala Thr Gly His Phe Cys Gln Arg Ser His His Met Tyr Ile Gly Ile Asp Leu Gly Thr Ser Gly 25 Val Lys Ala Ile Leu Leu Ser Glu Gln Gly Asp Val Leu Ala Thr Gln 40 Thr Glu Lys Leu Gln Val Ser Arg Pro His Pro Leu Trp Ser Glu Gln 55 Asp Pro Glu Gln Trp Trp Gln Ala Thr Asp Arg Ala Met Thr Ala Leu 70 75 Gly Glu Gln His Ser Leu Arg Asp Val Lys Ala Leu Gly Ile Ala Gly 85 90 Gln Met His Gly Ala Thr Leu Leu Asp Ser Gln His Arg Val Leu Arg 100 105 Pro Ala Ile Leu Trp Asn Asp Gly Arg Cys Ala Glu Glu Cys Ala Ile 120 Leu Glu Glu Arg Val Pro Ala Ser Arg Glu Ile Thr Gly Asn Leu Met 135 140 Met Pro Gly Phe Thr Ala Pro Lys Leu Leu Trp Val Gln Arg His Glu 150 155 Pro Asp Ile Phe Arg Gln Val Ala Lys Val Leu Leu Pro Lys Asp Tyr 165 170 Leu Arg Phe Arg Met Thr Gly Asp Phe Ala Ser Asp Met Ser Asp Ala 185 180 Ala Gly Thr Met Trp Leu Asp Val Ala Lys Arg Asp Trp Ser Glu Ala 200 205 Met Leu Asp Ala Cys Gln Leu Thr Arg Asp His Met Pro Ala Leu Phe 215 220 Glu Gly Ser Glu Ile Thr Gly Ala Leu Gln Pro Ser Val Ala Glu Arg 230 235 Trp Asn Met Pro Ala Val Pro Val Ile Ala Gly Gly Gly Asp Asn Ala 250 Ala Gly Ala Val Gly Val Gly Met Val Glu Ala Gly Gln Ala Met Leu 265 Ser Leu Gly Thr Ser Gly Val Tyr Phe Ala Val Ser Asp Gly Tyr Arg 280 Ser Asn Pro Gly Ser Ala Val His Ser Phe Cys His Ala Leu Pro Gly 295 300 Lys Trp His Leu Met Ser Val Met Leu Ser Ala Ala Ser Cys Leu Asp 310 315 Trp Ala Ala Lys Leu Thr Gly Met Ala Asp Val Pro Ala Leu Ile Ala 325 330 Ala Ala Gln Gln Ala Asp Asp Asn Ala Gly Ala Val Trp Phe Leu Pro 345 350 Tyr Leu Ser Gly Glu Arg Thr Pro His Asn Asn Pro Glu Ala Lys Gly 360 Val Phe Phe Gly Leu Thr His Gln His Gly Pro Ala Glu Leu Ala Arg 375

Ala Val Leu Glu Gly Val Gly Tyr Ala Leu Ala Asp Gly Met Asp Val

5481 390 395 Val His Asp Cys Gly Leu Thr Pro Ser Ser Ile Thr Leu Ile Gly Gly 405 410 Gly Ala Arg Ser Ser Tyr Trp Arg Gln Met Leu Ser Asp Ile Ser Gly 420 425 Leu Gln Leu Asp Tyr Arg Thr Gly Gly Asp Val Gly Pro Ala Leu Gly 440 Ala Ala Arg Leu Ala Gln Ile Ala Leu Asn Pro Asp Lys Pro Leu His 455 Gln Leu Leu Pro Gln Leu Ser Leu Glu Gln Gln His Arg Pro Asp Ala 470 475 Lys Asn His Ala Arg Tyr Ala Glu Arg Arg Asp Val Phe Arg Lys Ile 485 490 Tyr Arg Gln Leu Leu Pro Leu Met Ser 500 <210> 9969 <211> 313 <212> PRT <213> Enterobacter cloacae <400> 9969 Asn His Thr Tyr Pro Ala Arg Asn Thr Met Gln Lys Phe Asp Thr Lys 10 Thr Phe Gln Gly Leu Ile Leu Thr Leu Gln Asp Tyr Trp Ala Ser Gln 20 25 Gly Cys Thr Ile Val Gln Pro Leu Asp Met Glu Val Gly Ala Gly Thr 40 Ser His Pro Met Thr Ser Leu Arg Ala Leu Gly Pro Glu Pro Met Ala 55 Thr Ala Tyr Val Gln Pro Ser Arg Arg Pro Thr Asp Gly Arg Tyr Gly 70 Glu Asn Pro Asn Arg Leu Gln His Tyr Tyr Gln Phe Gln Val Val Ile 85 90 Lys Pro Ser Pro Asp Asn Ile Gln Glu Leu Tyr Leu Gly Ser Leu Lys 110 100 105 Glu Leu Gly Met Asp Pro Thr Ile His Asp Ile Arg Phe Val Glu Asp 120 Asn Trp Glu Asn Pro Thr Leu Gly Ala Trp Gly Leu Gly Trp Glu Val 135 140 Trp Leu Asn Gly Met Glu Val Thr Gln Phe Thr Tyr Phe Gln Gln Val 150 155 Gly Gly Leu Glu Cys Lys Pro Ile Thr Gly Glu Ile Thr Tyr Gly Leu 170 Glu Arg Leu Ala Met Tyr Ile Gln Gly Val Asp Ser Val Tyr Asp Leu 185 190 Val Trp Ser Asp Gly Pro Leu Gly Lys Thr Thr Tyr Gly Asp Val Phe 200 His Gln Asn Glu Val Glu Gln Ser Thr Tyr Asn Phe Glu Tyr Ala Asp 215 Val Asp Phe Leu Phe Thr Cys Phe Glu Gln Tyr Glu Lys Glu Ala Gln 230 235 Gln Leu Leu Ala Leu Glu Thr Pro Leu Pro Leu Pro Ala Tyr Glu Arg 250 245

Ile Leu Lys Ala Ala His Ser Phe Asn Leu Leu Asp Ala Arg Lys Ala 265 Ile Ser Val Thr Glu Arg Gln Arg Tyr Ile Leu Arg Ile Arg Thr Leu 280

285

Thr Lys Ala Val Ala Glu Ala Tyr Tyr Ala Ser Arg Glu Ala Leu Gly Phe Pro Met Cys Asn Arg Asn Lys

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<210> 9970
<211> 693
<212> PRT
<213> Enterobacter cloacae
<400> 9970
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Glu Ala Ala Met Ser Glu Lys Thr Phe Leu Val Glu Ile Gly Thr Glu Glu Leu Pro Pro Lys Ala Leu Arg Ser Leu Ala Glu Ser Phe Ala Ala 25 Asn Val Thr Ala Glu Leu Asp Asn Ala Gly Leu Ala His Gly Lys Ile Glu Trp Phe Ala Ala Pro Arg Arg Leu Ala Leu Lys Val Ala Asn Leu 55 Ala Ala Ser Gln Pro Asp Arg Glu Val Glu Lys Arg Gly Pro Ala Ile 70 75 Ala Gln Ala Phe Asp Ala Glu Gly Lys Pro Ser Lys Ala Ala Glu Gly 90 Trp Ala Arg Gly Cys Gly Ile Thr Val Asp Gln Ala Glu Arg Leu Thr 100 105 Thr Asp Lys Gly Glu Trp Leu Leu Tyr Arg Ala His Val Lys Gly Glu 115 120 125 Ser Ala Glu Ala Leu Leu Pro Asp Met Ile Ala Thr Ser Leu Ala Lys 135 140 Leu Pro Ile Pro Lys Leu Met Arg Trp Gly Ala Ser Asp Val His Phe 150 155 Val Arg Pro Val His Thr Val Thr Leu Leu Gly Asp Thr Val Ile 170 165 Pro Ala Thr Ile Leu Gly Val Ala Ser Asp Arg Val Ile Arg Gly His 180 185 Arg Phe Met Gly Glu Pro Glu Phe Thr Ile Asp Asn Ala Asp Gln Tyr 195 200 Pro Gln Ile Leu Leu Glu Arg Gly Lys Val Ile Ala Asp Tyr Glu Gln 215 220 Arg Lys Ala Lys Ile Lys Ala Asp Ala Glu Glu Ala Ala Arg Lys Ile 230 235 Gly Gly Asn Ala Asp Leu Ser Asp Ser Leu Leu Glu Glu Val Thr Ser 250 245 Leu Val Glu Trp Pro Val Val Leu Thr Ala Lys Phe Glu Glu Lys Phe 260 265 Leu Ala Val Pro Ala Glu Ala Leu Val Tyr Thr Met Lys Gly Asp Gln 275 280 285 Lys Tyr Phe Pro Val Tyr Ala Asn Asp Gly Lys Leu Leu Pro Asn Phe 290 295 300 Ile Phe Val Ala Asn Ile Glu Ser Lys Asp Pro Ser Gln Ile Ile Ser 310 315 Gly Asn Glu Lys Val Val Arg Pro Arg Leu Ala Asp Ala Glu Phe Phe 325 • 330 Phe Asn Thr Asp Arg Lys Lys Arg Leu Glu Asp Asn Leu Pro Arg Leu 345 Gln Thr Val Leu Phe Gln Gln Gln Leu Gly Thr Leu Arg Asp Lys Thr 360 Asp Arg Ile Ala Glu Leu Ser Gly Trp Ile Ala Arg Glu Ile Gly Ala 375 Asp Val Asn His Ala Thr Arg Ala Gly Leu Leu Ser Lys Cys Asp Leu 390 395 Met Thr Asn Met Val Phe Glu Phe Thr Asp Thr Gln Gly Val Met Gly 410 Met His Tyr Ala Arg His Asp Gly Glu Ala Glu Asp Val Ala Val Ala

```
425
            420
                                                     4.30
Leu Asn Glu Gln Tyr Gln Pro Arg Phe Ala Gly Asp Asp Leu Pro Ser
                            440
                                                445
Asn Pro Val Ala Cys Ala Val Ala Ile Ala Asp Lys Met Asp Thr Leu
                        455
                                            460
Ala Gly Ile Phe Gly Ile Gly Gln His Pro Lys Gly Asp Lys Asp Pro
                    470
                                        475
Phe Ala Leu Arg Arg Ala Ala Leu Gly Val Leu Arg Ile Ile Val Glu
                485
                                    490
Lys Asn Leu Asn Leu Asp Leu Gln Thr Leu Thr Glu Glu Ala Val Arg
                                505
Leu Tyr Gly Asp Lys Leu Thr Asn Ala Lys Val Val Asp Asp Val Ile
                            520
Asp Phe Met Leu Gly Arg Phe Arg Ala Trp Tyr Gln Asp Glu Gly Tyr
                        535
                                             540
Ser Val Asp Thr Ile Gln Ala Val Leu Ala Arg Arg Pro Thr Arg Pro
                    550
                                        555
Ala Asp Phe Asp Ala Arg Met Lys Ala Val Ser His Phe Arg Thr Leu
                                    570
                565
Glu Ala Ala Ser Ala Leu Ala Ala Ala Asn Lys Arg Val Ser Asn Ile
                                585
            580
Leu Ala Lys Ser Asp Glu Thr Leu Asn Asp Arg Val Asn Ala Ala Thr
                            600
        595
Leu Lys Glu Pro Glu Glu Ile Ser Leu Ala Met Gln Val Val Leu
                        615
                                             620
    610
Arg Asp Lys Leu Glu Pro Tyr Phe Ala Glu Gly Arg Tyr Gln Glu Ala
                    630
                                        635
Leu Val Glu Leu Ala Glu Leu Arg Asp Val Ile Asp Ala Phe Phe Glu
                                    650
                645
Lys Val Met Val Asn Val Glu Asp Lys Glu Leu Arg Ile Asn Arg Leu
            660
                                665
Ser Met Leu Glu Lys Leu Arg Glu Leu Phe Leu Arg Val Ala Asp Ile
        675
                            680
Ser Leu Leu Gln
    690 .
<210> 9971
<211> 454
<212> PRT
<213> Enterobacter cloacae
<400> 9971
Leu Glu Val Lys Lys Thr Lys Gly Arg Met Met Asp Ser Leu Ala Ser
                                    10
Leu Tyr Lys Asn His Ile Val Thr Leu Gln Glu Arg Thr Arg Asp Val
Leu Ala Arg Phe Lys Leu Asp Ala Leu Leu Ile His Ser Gly Glu Leu
Met Asn Thr Phe Leu Asp Asp His Ala Tyr Pro Phe Lys Val Asn Pro
Gln Phe Lys Ala Trp Val Pro Val Thr Gln Val Pro Asn Cys Trp Leu
                                        75
Leu Val Asp Gly Val Asn Lys Pro Lys Leu Trp Phe Tyr Leu Pro Val.
                                    90
                85
Asp Tyr Trp His Asn Val Glu Pro Leu Pro Thr Ser Phe Trp Thr Glu
            100
                                105
                                                     110
```

Glu Ile Asp Val Ile Ala Leu Pro Lys Ala Asp Gly Ile Gly Ser Gln 120

Leu Pro Ala Ala Arg Gly Asn Ile Gly Tyr Ile Gly Pro Val Pro Glu

Arg Ala Leu Gly Leu Asp Ile Pro Ala Asp Lys Leu Asn Pro Lys Gly

135

125

```
150
                                        155
Val Leu Asp Tyr Leu His Tyr Tyr Arg Ala Tyr Lys Thr Asp Tyr Glu
               165
                                   170
Leu Tyr Cys Met Arg Glu Ala Gln Lys Thr Ala Val Asn Gly His Arg
                                                    190
           180
                               185
Ala Ala His Glu Ala Phe Gln Ser Gly Met Ser Glu Phe Asp Ile Asn
                           200
                                               205
Gln Ala Tyr Leu Thr Ala Thr Gly His Arg Asp Thr Asp Val Pro Tyr
                       215
                                           220
Ser Asn Ile Val Ala Leu Asn Glu His Ala Ser Val Leu His Tyr Thr
                    230
                                        235
Lys Leu Asp His Gln Val Pro Ala Glu Met Arg Ser Phe Leu Leu Asp
                                    250
Ala Gly Ala Glu Tyr Asn Gly Tyr Ala Ala Asp Leu Thr Arg Thr Trp
                                265
Ala Ala Asn Ala Asp Thr Asp Phe Ala Gln Leu Ile Lys Asp Val Asn
                            280
Asp Glu Gln Leu Ala Leu Ile Gly Thr Met Lys Ala Gly Thr Ser Tyr
                        295
                                            300
Val Asp Tyr His Ile Gln Phe His Gln Arg Ile Ala Lys Leu Leu Arg
                                        315
                    310
Lys His Gln Ile Ile Lys Asp Met Ser Glu Glu Ala Met Val Glu Asn
                325
                                    330
Asp Leu Thr Gly Pro Phe Met Pro His Gly Ile Gly His Pro Leu Gly
                                345
            340
Leu Gln Val His Asp Val Ala Gly Phe Met Gln Asp Asp Thr Gly Thr
       355
                            360
                                                365
His Leu Ala Ala Pro Ser Lys Tyr Pro Tyr Leu Arg Cys Thr Arg Val
                        375
                                            380
Leu Ala Pro Arg Met Val Leu Thr Ile Glu Pro Gly Ile Tyr Phe Ile
                    390
                                        395
Glu Ser Leu Leu Ala Pro Trp Arg Glu Gly Gln Phe Ser Lys His Phe
                405
                                    410
Asn Trp Glu Lys Ile Glu Ala Leu Lys Pro Tyr Gly Gly Ile Arg Ile
                                425
           420
Glu Asp Asn Val Val Ile His Glu Asn Ser Ile Glu Asn Met Thr Arg
       435
                            440
Asp Leu Lys Leu Ala
   450
<210> 9972
<211> 848
<212> PRT
<213> Enterobacter cloacae
<400> 9972
Ala Gly Arg Leu Leu Met Ile Leu Val Pro Ser Pro Pro Pro Thr Pro
Ser Leu Phe Lys Ile Met Pro Phe Arg Leu Phe Arg Tyr Ala Pro Leu
Ser Val Leu Leu Ser Phe Ser Arg Ala Gly Met Ala Glu Asp Tyr
                            40
Phe Asp Pro Ala Ala Leu Glu Leu Ser Ser Thr Glu Gln Lys Thr Ala
                                            60
                        55
```

Asp Leu His Tyr Phe Ser Glu Lys Gly Gln Met Pro Gly Thr Trp

Leu Val Thr Leu Glu Ile Asn Gly Arg Glu Glu Arg His Gln Glu Ile

Thr Phe Val Asn Glu Lys Gly Ser Leu Gln Pro Val Phe Ser Val Ser 100 105 110 Leu Leu Glu Ala Leu Ser Val Asn Val Gly Ala Ile Pro Ala Phe Ser

75

90

120 125 115 Arg Leu Gln Glu Gly Glu Thr Phe Thr His Leu Glu Asp Phe Ile Pro 135 140 Ala Ala Arg Thr Ser Tyr Asp Phe Asn Gln Gln Arg Leu Phe Leu Asn 150 155 Leu Pro Gln Ala Ala Met Lys His Arg Ser Arg Gly Tyr Val Pro Gln 170 165 Ser Gln Trp Asp Asp Gly Ile Pro Ala Ala Phe Thr Asp Tyr Ser Leu 180 185 Ser Gly Gly Gln Ala Arg His Gln Ser Gly Val Thr Thr Ser Ser Tyr 200 Leu Ser Leu Arg Asn Gly Ile Asn Leu Gly Ala Trp Arg Leu Arg Asn 215 220 Thr Ser Ala Trp Ser His Ser Asp Ala Gly Gly Asn His Phe Gln Ser 230 235 Gln Ser Ser Trp Leu Ser Arg Asp Ile Arg Arg Leu Asn Ser Gln Leu 245 250 Arg Ile Gly Asp Ala Trp Thr Ala Gly Asp Val Phe Asp Ser Val Ala 260 265 Phe Arg Gly Val Gln Leu Ser Ser Glu Ser Met Leu Pro Asp Ser 275 280 Gln Arg Gly Phe Ala Pro Thr Ile Arg Gly Val Ala His Ser Phe Ala 295 300 Lys Val Ser Val Ser Gln Asn Gly Tyr Val Ile Tyr Glu Thr Trp Val 310 315 Ala Ala Gly Pro Phe Ile Ile Asn Asp Leu Phe Pro Gly Ala Gln Ser 325 330 Gly Asp Leu Gln Val Thr Val Thr Glu Ser Asp Gly Ser Thr Arg Val 345 340 Phe Thr Gln Pro Tyr Ser Ala Val Pro Phe Met Arg Arg Gln Gly Ser 360 365 Leu Lys Tyr Ser Leu Asn Ala Gly Arg Phe His Ser Gly Ser Gly Asp 370 375 380 Ala Arg Ser Pro Glu Phe Val Glu Gly Ala Phe Phe Tyr Gly Leu Leu 390 395 Ser Arg Met Thr Val Tyr Gly Gly Phe Arg Thr Ala Ser Asn Tyr Gln 405 410 Ala Gly Ala Ile Gly Ile Gly Arg Gly Phe Gly Ala Phe Gly Ser Leu 420 425 Gly Ile Asp Asp Thr Leu Ala Lys Ser His Leu Pro Asp Gly Lys Asn 440 445 Ala Ile Gly Gln Ala Trp Arg Ile Gln Tyr Gln Lys Asp Phe Ser Ala 455 460 Thr Gly Thr Ala Phe Asn Leu Ala Ser Tyr Arg Tyr Ala Ser Arg Asn 470 475 Tyr Tyr Glu Phe Ser Glu Leu Asn Gln Ser Asp Ser Gln Gln Leu Gln 490 Leu Asn Asn Arg Arg Ser Arg Ser Gln Val Thr Phe Ser Gln Thr Leu Gly Gln Phe Gly Ser Leu Ser Val Ser Ala Trp Met Gln Asp Tyr Trp 520 His Thr Ser Gly Gln Asp Lys Thr Ile His Ile Gly Trp Tyr Thr Ser 535 540 Trp Arg Gly Ile Ser Trp Gly Ala Gly Tyr Asp Tyr Thr Asp Ser Ala 550 555 Arg Glu Gln His Pro Asp Arg Thr Val Ser Phe Asn Val Asn Val Pro 570 Leu Gly His Trp Leu Pro Asp Ser Ser Val Ser Tyr Phe Ile Asn His 585 Asn Asn Arg Gly Met Thr Thr Gln Gln Met Ser Leu Asn Gly Ser Ala 600

Leu Ala Asn Arg Asn Leu Asn Tyr Ser Val Gln Gln Ser Lys Ala Ser 615 620 Glu Gly Gln Ala Asp Ser Thr Ser Leu Ala Leu Gln Tyr Asn Gly Gly 630 635 Tyr Gly Asn Val Ser Leu Gly Tyr Asp His Ser Arg Ser Gly Ser Asn 645 650 Ala Ser Leu Gly Leu Ala Gly Gly Val Ile Ala Thr Gln Tyr Gly Val 665 Thr Leu Ser Glu Pro Leu Gly Asp Thr Val Ala Leu Leu Arg Val Pro 680 Gly Ala Ala Asn Val Glu Pro Glu Gly Tyr Asn Gly Ile His Thr Asp 700 695 Ser Arg Gly Tyr Ala Val Met Pro Thr Leu Ser Ala Tyr Arg Lys Asn 710 715 Thr Val Ser Leu Asp Thr Ala Thr Leu Gly Glu Asn Val Asp Val Glu 725 730 Gln Ser Gly Leu Thr Leu Ile Pro Thr Ser Gly Ala Val Val Leu Ala 740 745 Asn Tyr Lys Thr His Ile Gly Tyr Arg Val Leu Phe Ser Leu Arg Tyr 760 765 His Gly Glu Pro Leu Pro Phe Gly Ala Gln Ala Glu Val Val Glu Gln 775 770 780 Asn Arg His Ser Ala Asn Arg Ser Met Val Ala Asp Gly Gly Gln Ala 790 795 Tyr Leu Ser Gly Val Pro Glu Arg Gly Thr Leu Arg Val Thr Trp Tyr 805 . 810 Glu Asn Gly Glu Gln Gln Cys Gln Thr Pro Phe Arg Leu Gly Lys 820 825 Ala His Met Ala Pro Gly Ile Ala Thr Leu Ser Leu Glu Cys His 840

<210> 9973

<211> 368

<212> PRT

<213> Enterobacter cloacae

# <400> 9973

Arg Asn Ile Met Arg Arg Phe Ile His Trp Phe Phe Tyr Leu Ser Leu 10 Leu Ser Leu Phe Gly Met Leu Ser Phe His Ala His Ala Gln Thr Ser Thr Cys Arg Thr Thr Arg Asp Gln Trp Val Val Gln Val Pro Tyr Ala Ile Gly Tyr Ala Pro Gly Thr Ser Asp Trp Thr Pro Ile Ser Ala Pro Ile Gln Ser Thr Gly Ala Asp Phe Tyr Ser Cys Asp Gly Gly Asn Asp 75 Pro Trp Arg Ser Ile Gly Phe Val Glu Leu Asp Asn Pro Val Gly Thr Val Val Gly Glu Asp Gly Ala Ser Arg His Val Tyr Lys Thr Gln Ile 105 Asp Gly Ile Gly Tyr Ala Leu Gly Phe Arg Glu Gln Gln Tyr Cys Gly 120 115 Ala Asp Ala Val Arg Tyr Ile Asp Gly Thr Ser Pro Val Asp Gly Asn 135 140 Glu Ser Arg Arg Ile Cys Asp Ala Ser Gln Asn Pro Ala Phe Ala Ser 155 150 Ala Pro Thr Tyr Lys Leu Gln Phe Trp Val Val Phe Tyr Lys Ile Pro 165 170 Thr Thr Ser Pro Met Pro Asp Asp Asn Ala Asn Ser Gln Glu Gln Asn 185

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Val Gly Ser Leu Ile Leu Gln Ala Gly Glu Asn Gln Ala Ser Ala Thr
        195
                            200
                                                205
Asn Val Ala Thr Pro Val Gln Ile His Leu Ala Ser Phe Thr Val Arg
                        215
                                            220
Arg Thr Ser Cys Ser Val Gly Ser Arg Ser Ile Leu Val Pro Met Gly
                    230
                                        235
Ser Val Ser Gln Arg Glu Phe His Gly Ile Gly Phe Arg Ala Gly Gly
                245
                                    250
Gly Arg Phe Ser Ile Pro Val Thr Cys Glu Asn Asn Thr Ala Val Lys
            260
                                265
                                                     270
Met Gly Phe Phe Gly Asp Thr Thr Pro Gly Asn Asp Arg Ala Leu Ala
                            280
Leu Thr Lys Gln Glu Asp Ser Ala Ser Gly Val Gly Ile Glu Leu Leu
                        295
Tyr Gly Asp Asn Thr Gly Ser Val Gln Gly Gln Val Val Pro Trp Asn
                    310
                                         315
Thr Pro Gln Val Ser Ala Leu Gly Gln Val Gly Asp Asn Gln Thr Gln
                325
                                    330
Thr Phe Trp Phe Asp Ala His Tyr Ile Gln Thr Glu Ala Asn Val Thr
                                345
Ala Gly Lys Ala Asp Ala Met Ala Thr Phe Asn Leu Ile Tyr Asn
                            360
<210> 9974
<211> 548
<212> PRT
<213> Enterobacter cloacae
<400> 9974
Ile Trp Arg Arg Ser Pro Ser Pro Ala Pro Ser Ala Thr Ser Ile Ser
                                    10
Ala Ala Ser Arg Arg Ala Gly Ala Trp Ile Val Arg Cys Trp Ser Asn
                                25
Trp Arg Arg Ser Ser Ser Ala Lys Val Ser Pro Gly Leu Asn His
                                                 45
                            40
Gln Arg Leu Asp Ala Gly Tyr Asn Thr Ser Trp Arg Glu Ala Val Gln
                        55
Ser Pro His Met Leu Thr Pro Ser Pro Val Gly Arg Gly Glu Asp Ile
                    70
                                        75
Tyr Ser Pro Gly Ala Phe Met Thr Thr His His Ser Leu Tyr Ser Gln
                                    90
Ile Pro Ala Thr Asp Arg Leu Leu Arg Asp Pro Arg Ile Thr Ala Val
            100
                                105
                                                     110
Leu Glu Gln Phe Gly His Thr Ala Thr Val Asp Met Leu Arg Gln Leu
                            120
Gln Asp Asp Ala Arg Arg His Ile Gln Ala Glu Asn Ala Leu Pro Gly
                        135
Trp Cys Glu Ala Trp Ala Gln Glu Val Glu Arg Arg Leu Ser Lys His
                    150
                                        155
Ala Gln Ser Ala Leu Arg Pro Val Ile Asn Leu Thr Gly Thr Val Leu
                                     170
His Thr Asn Leu Gly Arg Ala Gln Gln Ala Glu Glu Ala Ile Asp Ala
            180
                                185
Val Thr Arg Ala Met Arg Ser Pro Val Thr Leu Glu Tyr Asp Leu Asp
        195
                            200
                                                 205
Gly Ala Gly Arg Gly His Arg Asp Arg Ala Leu Ala Asp Leu Leu Cys
                        215
                                            220
Gln Ile Thr Gly Ala Glu Asp Ala Cys Ile Val Asn Asn Asn Ala Ala
                    230
                                        235
Ala Val Leu Leu Met Leu Ala Ala Thr Ala Ser Gly Lys Glu Val Val
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Val Ser Arg Gly Glu Leu Val Glu Ile Gly Gly Ala Phe Arg Ile Pro
            260
                                265
Asp Val Met Arg Gln Ala Gly Cys Thr Leu His Glu Val Gly Thr Thr
                            280
Asn Arg Thr His Ala Lys Asp Tyr Arg Ala Ala Val Asn Glu Asn Thr
                        295
                                             300
Ala Leu Leu Met Lys Val His Thr Ser Asn Tyr His Ile Glu Gly Phe
                    310
                                         315
Thr Lys Thr Val Glu Glu Ala Glu Leu Ala Ala Ile Gly Arg Glu Leu
                                    330
                325
Asn Val Pro Val Ile Ala Asp Leu Gly Ser Gly Ser Leu Val Asp Met
                                345
Arg Gln Tyr Gly Leu Pro Lys Glu Pro Met Val Gln Glu Met Val Ala
                            360
Ala Gly Val Ser Leu Val Ser Phe Ser Gly Asp Lys Leu Leu Gly Gly
                        375
                                             380
Pro Gln Ala Gly Ile Ile Val Gly Arg Arg Glu Leu Ile Ala Gln Leu
                    390
                                         395
Gln Gln His Pro Leu Lys Arg Ala Leu Arg Ala Asp Lys Met Thr Leu
                405
                                    410
Ala Ala Leu Glu Ala Thr Leu Arg Leu Tyr Leu His Pro Glu Lys Leu
            420
                                425
                                                     430
Ala Asp Arg Leu Pro Thr Leu Arg Leu Leu Ser Arg Asp Ala Ala Ser
                            440
        435
Val Arg Ala Gln Ala Glu Ala Leu Leu Pro Gln Val Ala Pro His Tyr
                        455
                                             460
Pro Glu Phe Glu Val Arg Ile Glu Pro Cys Leu Ser Gln Ile Gly Ser
                    470
                                         475
Gly Ser Leu Pro Val Asp Arg Leu Pro Ser Glu Ala Leu Thr Phe Thr
                485
                                    490
Pro Arg Asp Gly Arg Gly Ser Gln Leu Glu Ala Leu Ser Ala Arg Trp
            500
                                505
Arg Ala Leu Pro Thr Pro Val Ile Gly Arg Ile Gly Asp Gly Arg Met
                            520
                                                 525
Trp Leu Asp Leu Arg Cys Leu Glu Asp Glu Val Arg Phe Leu Glu Met
    530
                        535
Met Leu Lys
545
<210> 9975
<211> 547
<212> PRT
<213> Enterobacter cloacae
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<400> 9975

Ser Thr Val Ile Arg Asp Thr Ala Arg Lys Pro Val Thr Asp Trp Arg 10 Glu Asn His Gln Pro Glu Leu Pro Leu Leu Tyr Thr Tyr Cys Lys Glu 25 Thr Val Met Thr Asn Asn Pro Pro Ser Ser Arg Ile Gln Pro Gly Glu 40 Tyr Gly Phe Pro Leu Lys Leu Lys Pro Arg Tyr Asp Asn Phe Ile Gly 55 Gly Asp Trp Val Ala Pro Val Asp Gly Glu Tyr Tyr Ser Asn Leu Thr 70 75 Pro Val Thr Gly Gln Pro Leu Cys Glu Ile Ala Ser Ser Gly Lys Arg 85 90 95 Asp Ile Asp Leu Ala Leu Asp Ala Ala His Lys Ala Lys Asp Lys Trp 105 Gly Gln Thr Ser Val Gln Asp Arg Ala Ala Ile Leu Phe Lys Ile Ala 120

Asp Arg Ile Glu Gln Asn Leu Glu Leu Leu Ala Thr Ala Glu Thr Trp 140 135 Asp Asn Gly Lys Pro Ile Arg Glu Thr Met Ala Ala Asp Val Pro Leu 150 155 Ala Ile Asp His Phe Arg Tyr Phe Ala Ser Cys Ile Arg Ala Gln Glu 170 165 Gly Gly Ile Ser Glu Val Asp Lys Asp Thr Val Ala Tyr His Phe His 180 185 Glu Pro Leu Gly Val Val Gly Gln Ile Ile Pro Trp Asn Phe Pro Leu 200 205 Leu Met Ala Ser Trp Lys Met Ala Pro Ala Leu Ala Ala Gly Asn Cys 215 220 Val Val Leu Lys Pro Ala Arg Leu Thr Pro Leu Ser Val Leu Leu Leu 230 235 Met Glu Val Ile Gly Asp Leu Leu Pro Pro Gly Val Ile Asn Val Val 245 250 Asn Gly Ala Gly Glu Ile Gly Glu Tyr Leu Ala Thr Ser Lys Arg 260 265 270 Ile Ala Lys Val Ala Phe Thr Gly Ser Thr Glu Val Gly Gln Gln Ile 275 280 285 Met Gln Tyr Ala Thr Gln Asn Ile Ile Pro Val Thr Leu Glu Leu Gly 295 300 Gly Lys Ser Pro Asn Ile Phe Phe Ala Asp Val Met Asp Glu Glu Asp 310 315 Ala Phe Phe Asp Lys Ala Leu Glu Gly Phe Ala Leu Phe Ala Phe Asn 325 330 Gln Gly Glu Val Cys Thr Cys Pro Ser Arg Ala Leu Val Gln Glu Ser 340 345 350 Ile Tyr Glu Arg Phe Met Glu Arg Ala Ile Arg Arg Val Glu Ser Ile 360 365 Arg Ser Gly Asn Pro Leu Asp Asn Val Thr Gln Met Gly Ala Gln Val 375 380 Ser His Gly Gln Leu Glu Thr Ile Leu Asn Tyr Ile Asp Ile Gly Lys 395 390 Lys Glu Gly Ala Asp Val Leu Thr Gly Gly Arg Arg Lys Val Leu Gly 405 410 Gly Asp Leu Gln Glu Gly Tyr Tyr Leu Glu Pro Thr Ile Leu Phe Gly 420 425 4:30 Lys Asn Asn Met Arg Val Phe Gln Glu Glu Ile Phe Gly Pro Val Leu 440 435 445 Ala Val Thr Thr Phe Lys Thr Met Asp Glu Ala Leu Glu Leu Ala Asn 455 460 Asp Thr Gln Tyr Gly Leu Gly Ala Gly Val Trp Ser Arg Asn Gly Asn 470 475 Leu Ala Tyr Lys Met Gly Arg Gly Ile Gln Ala Gly Arg Val Trp Thr 485 490 495 Asn Cys Tyr His Ala Tyr Pro Ala His Ala Ala Phe Gly Gly Tyr Lys 500 505 510 Gln Ser Gly Ile Gly Arg Glu Thr His Lys Met Met Leu Glu His Tyr 520 525 Gln Gln Thr Lys Cys Leu Leu Val Ser Tyr Ser Asp Lys Pro Leu Gly 530 535 540 Leu Phe 545 <210> 9976

<211> 89

<212> PRT

<213> Enterobacter cloacae

 Val
 Ala
 Lys
 Asp
 Gly
 Tyr
 Ser
 Phe
 Leu
 Asn
 Ala
 Leu
 Arg
 Val
 Lys
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<210> 9977

<211> 123

<212> PRT

<213> Enterobacter cloacae

<400> 9977

 Arg Thr Arg Phe Ala Glu Asp Asp Pro Arg Glu Arg Tyr Ala Ile Gly

 Val Ile Asp His Gln Arg Asp Asp Ala Val Leu Ile Arg Gln Arg Ile Gln

 Leu His Gln Leu Val Val Gly Asp His Val Pro Arg Arg Val Gly Gly

 Thr Arg Tyr Ala Asp His Ala Arg Leu Phe Thr Asp Met Gln Met Phe

 50

 Lys Ile Asp Val Ile Phe Glu Leu Ala Leu Trp Gln Gln Leu Asp Ile

 65
 70

 Arg Thr Cys Gly Asn Lys Gln Val Phe Phe Glu Ala Gly Ile

 Ala Asn Ile Leu Arg Cys Gln Arg Glu Gln His Phe Phe Arg Gly Ala

 100

 100

 100

 100

<210> 9978

<211> 470

<212> PRT

<213> Enterobacter cloacae

Val Gly Ala Ala Ser Gly Glu Gln Ile Glu

<400> 9978

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150
                                       155
Gln Ser Gly Val Lys Leu Leu Trp Gly Thr Ala Asn Cys Phe Thr Asn
               165
                                  170
Pro Arg Tyr Gly Ala Gly Ala Ala Thr Asn Pro Asp Pro Glu Val Phe
                                185
           180
                                                   190
Ser Trp Ala Ala Thr Gln Val Val Thr Ala Met Asn Ala Thr His Gln
                           200
                                               205
Leu Gly Gly Glu Asn Tyr Val Leu Trp Gly Gly Arg Glu Gly Tyr Glu
                       215
                                           220
Thr Leu Leu Asn Thr Asp Leu Arg Gln Glu Arg Glu Gln Ile Gly Arg
                    230
                                        235
Phe Met Gln Met Val Val Asp His Lys His Lys Ile Gly Phe Arg Gly
                                    250
Thr Leu Leu Ile Glu Pro Lys Pro Gln Glu Pro Thr Lys His Gln Tyr
                                265
Asp Tyr Asp Val Ala Thr Val Tyr Gly Phe Leu Lys Gln Phe Gly Leu
                            280
                                                285
Glu Lys Glu Ile Lys Val Asn Ile Glu Ala Asn His Ala Thr Leu Ala
                        295
                                            300
Gly His Ser Phe His His Glu Ile Ala Ser Ala Ile Ala Leu Gly Ile
                    310
                                        315
Phe Gly Ser Val Asp Ala Asn Arg Gly Asp Pro Gln Leu Gly Trp Asp
                                    330
                325
Thr Asp Gln Phe Pro Asn Ser Val Glu Glu Asn Ala Leu Val Met Tyr
            340
                                345
Glu Ile Ile Lys Ala Gly Gly Phe Thr Thr Gly Gly Leu Asn Phe Asp
                            360
                                                365
Ala Lys Val Arg Arg Gln Ser Thr Asp Lys Tyr Asp Leu Phe Tyr Gly
                        375
                                            380
His Ile Gly Ala Met Asp Thr Met Ala Leu Ala Leu Lys Val Ala Ala
                    390
                                        395
Arg Met Ile Glu Asp Gly Glu Leu Asp Lys Arg Val Ala Lys Arg Tyr
                405
                                    410
Ser Gly Trp Asn Ser Glu Leu Gly Gln Gln Ile Leu Lys Gly Gln Leu
                                                    430
            420
                                425
Ser Leu Ala Glu Ile Ala Lys Tyr Ala Glu Gln His Gln Leu Ala Pro
                            440
Gln His Gln Ser Gly His Gln Glu Leu Leu Glu Asn Leu Val Asn His
                        455
                                            460
Tyr Leu Phe Asp Lys
465
<210> 9979
<211> 491
<212> PRT
<213> Enterobacter cloacae
<400> 9979
Ile Pro Lys Glu Ala Ala Glu Met His Phe Arg Ala Ile Thr Arg Ile
Val Gly Leu Leu Val Ile Leu Phe Ser Gly Thr Met Ile Ile Pro Gly
Leu Val Ala Leu Ile Tyr Arg Asp Gly Ala Gly Arg Ala Phe Thr Gln
                            40
Thr Phe Phe Val Ala Leu Thr Ile Gly Ser Leu Leu Trp Trp Pro Asn
Arg Arg Glu Lys Gly Glu Leu Lys Ser Arg Glu Gly Phe Leu Ile Val
                                        75
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Val Leu Phe Trp Thr Val Leu Gly Ser Val Gly Ala Leu Pro Phe Ile

Phe Ser Glu Gln Pro Asn Leu Thr Val Thr Asp Ala Phe Phe Glu Ser

```
105
            100
                                                    110
Phe Ser Gly Leu Thr Thr Gly Ala Thr Thr Leu Val Gly Leu Asp
                            120
                                               125
Ser Leu Pro His Ala Ile Leu Phe Tyr Arg Gln Met Leu Gln Trp Phe
                        135
                                            140
Gly Gly Met Gly Ile Ile Val Leu Ala Val Ala Ile Leu Pro Ile Leu
                    150
                                        155
Gly Val Gly Met Gln Leu Tyr Arg Ala Glu Met Pro Gly Pro Leu
                                    170
Lys Asp Asn Lys Met Arg Pro Arg Ile Ala Glu Thr Ala Lys Thr Leu
            180
                                185
Trp Leu Ile Tyr Val Leu Leu Thr Val Ala Cys Ala Leu Ala Leu Trp
                            200
Phe Ala Gly Met Pro Ala Phe Asp Ala Ile Gly His Ser Phe Ala Thr
                        215
                                            220
Ile Ala Ile Gly Gly Phe Ser Thr His Asp Ala Ser Val Gly Tyr Phe
                    230
                                        235
Asp Ser Pro Thr Ile Asn Thr Ile Ile Ala Ile Phe Leu Leu Ile Ser
                245
                                    250
Gly Cys Asn Tyr Gly Leu His Phe Ser Leu Leu Ser Gly Arg Ser Leu
                                                    270
            260
                                265
Lys Val Tyr Trp Arg Asp Pro Glu Phe Arg Met Phe Ile Gly Val Gln
        275
                            280
                                                285
Leu Thr Leu Val Ile Ile Cys Thr Leu Val Leu Trp Phe His Asp Val
                        295
                                            300
Tyr Asn Ser Ala Val Thr Thr Leu Asn Gln Ala Phe Phe Gln Val Val
                    310
                                        315
Ser Met Ala Thr Thr Ala Gly Phe Thr Thr Asp Ser Ile Ala Arg Trp
                325
                                    330
Pro Leu Phe Leu Pro Val Leu Leu Cys Ser Ala Phe Ile Gly Gly
            340
                                345
                                                     350
Cys Ala Gly Ser Thr Gly Gly Gly Leu Lys Val Ile Arg Ile Leu Leu
                            360
                                                365
Leu Phe Lys Gln Gly Asn Arg Glu Leu Lys Arg Leu Val His Pro Asn
                        375
                                            380
Ala Val Tyr Ser Ile Lys Leu Gly Asn Arg Ala Leu Pro Glu Arg Ile
                    390
                                        395
Leu Glu Ala Val Trp Gly Phe Phe Ser Ala Tyr Ala Leu Val Phe Ile
                405
                                    410
Val Ser Met Leu Ala Ile Ile Ala Thr Gly Val Asp Asp Phe Ser Ala
                                425
            420
Phe Ala Ser Val Val Ala Thr Leu Asn Asn Leu Gly Pro Gly Leu Gly
        435
                            440
Val Val Ala Asp Asn Phe Ala Ser Met Asn Pro Val Ala Lys Trp Ile
                        455
                                            460
Leu Ile Ala Asn Met Leu Phe Gly Arg Leu Glu Val Phe Thr Leu Leu
                    470
                                        475
Val Leu Phe Thr Pro Thr Phe Trp Arg Glu
                485
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<210> 9980

<211> 99

<212> PRT

<213> Enterobacter cloacae

<400> 9980

Gly Glu Met Gly Glu Leu Leu Asn Ser Gly Leu Leu Ser Ile Ala 1 5 10 15 Ser Leu Val Met Ser Leu Val Val Leu Val Val Gly Leu Val Leu Trp 20 25 30 Phe Phe Val Asn Arg Ala Ser Ser Arg Thr Asn Glu Gln Ile Glu Leu

<210> 9981 <211> 172 <212> PRT <213> Enterobacter cloacae

<400> 9981 Thr His Ser Gln Gln Gln Ser Val Lys Pro Met Lys Tyr Asp Thr Ser Glu Leu Cys Asp Ile Tyr Gln Glu Asp Val Asn Val Val Glu Pro Leu 20 25 Phe Ser Asn Phe Gly Gly Arg Ser Ser Phe Gly Gly Gln Ile Ile Thr 40 Val Lys Cys Phe Glu Asp Asn Gly Leu Leu Tyr Asp Leu Leu Glu Glu 50 55 Asn Gly Arg Gly Arg Val Leu Leu Val Asp Gly Gly Ser Val Arg 75 Arg Ala Leu Ile Asp Ala Asp Leu Ala Arg Leu Ala Val Gln Asn Glu 85 90 Trp Glu Gly Ile Val Val Tyr Gly Ser Val Arg Gln Val Asp Asp Leu 105 100 Glu Asp Leu Asp Ile Gly Ile Gln Ala Ile Ala Ala Ile Pro Val Gly 120 125 Ala Ala Gly Glu Gly Ile Gly Glu Ser Asp Val Arg Val Asn Phe Gly 135 140

Gly Val Thr Phe Phe Ser Gly Asp His Leu Tyr Ala Asp Asn Thr Gly

155

150

Ile Ile Leu Ser Glu Asp Ala Leu Asp Ile Glu

165

<210> 9982 <211> 234 <212> PRT <213> Enterobacter cloacae

<400> 9982 Thr Met Asn Lys Ile Leu Leu Val Asp Asp Asp Arg Glu Leu Thr Ser Leu Leu Lys Glu Leu Leu Asp Met Glu Gly Phe Asn Val Leu Val Ala His Asp Gly Glu Gln Ala Leu Ser Leu Leu Asp Asp Ser Ile Asp Leu 40 Leu Leu Leu Asp Val Met Met Pro Lys Lys Asn Gly Ile Asp Thr Leu 55 Lys Glu Leu Arg Gln Thr His Gln Thr Pro Val Ile Met Leu Thr Ala 70 75 Arg Gly Ser Glu Leu Asp Arg Val Leu Gly Leu Glu Leu Gly Ala Asp 90 85 Asp Tyr Leu Pro Lys Pro Phe Asn Asp Arg Glu Leu Val Ala Arg Ile 105 Arg Ala Ile Leu Arg Arg Ser His Trp Ser Glu Gln Gln Asn Thr 120

Asp Asn Ser Ser Pro Thr Leu Glu Val Asp Ser Leu Ser Leu Asn Pro 130 135 140 Gly Arg Gln Glu Ala Ser Phe Asp Gly Glu Thr Leu Glu Leu Thr Gly 150 155 Thr Glu Phe Thr Leu Leu Tyr Leu Leu Ala Gln His Leu Gly Gln Val 165 170 175 Val Ser Arg Glu His Leu Ser Gln Glu Val Leu Gly Lys Arg Leu Thr 180 185 Pro Phe Asp Arg Ala Ile Asp Met His Ile Ser Asn Leu Arg Arg Lys 200 Leu Pro Glu Arg Lys Asp Gly His Pro Trp Phe Lys Thr Leu Arg Gly 215 Arg Gly Tyr Leu Met Val Ser Ala Ser 230 <210> 9983

<211> 340

<212> PRT

<213> Enterobacter cloacae

<400> 9983

Glu Ile Phe Ala Lys Arg Gly Gly Asp Glu Glu Val Ser Leu Phe Arg 10 Lys Phe Gly Phe Pro Val Leu Ile Val Leu Ala Arg Ile Val Ala Gln 25 Arg Ala Ile Gly Pro Ala Val Asp Phe Leu Phe Ser Leu Leu Val Thr 40 Arg Lys Pro Glu Ile Gly Gln Arg Gln Leu Thr Val Asp Leu His Phe 55 Gly Asp Gly Thr Arg Ala Ala Phe Val Leu Pro Tyr Leu Ala Cys 70 75 Lys His Ile His Arg Val Met His Leu His Ser Phe Arg Tyr Lys Lys 85 90 Ser Glu Ser Ser Asp Ser Leu Leu Thr Gly Val Asn Ala Thr Leu Phe 100 105 Phe Ser Gly Glu Thr Arg Cys Cys Phe Val Pro Val His His Val Pro 120 115 125 Glu Gly Phe Asp Val Val Arg Ala Thr Val Leu Glu Leu Gln Val Val 135 140 Ser Val Phe Pro His Val Gln Thr Gln Asn Trp Glu Ala Gly Cys Ala 150 155 Arg Asp Ser Phe Thr His Lys Arg Gly Ile Leu Val Ser Gly Arg Asn 165 170 Asp Arg Gln Phe Val Thr Phe Gln Asn Gln Pro Arg Pro Ala Arg Ala 180 185 190 Glu Thr Gly Cys Ser Gly Phe Phe Glu Phe Arg Phe Glu Val Val Asn 195 200 205 Gly Thr Glu Val Thr Leu Asp Ser Arg Phe Gln Val Ala Leu Lys Gly 215 Gly Ala Gly Phe Gln Ala Phe Pro Glu Gln Ala Val Val Ser Val Thr 230 235 Ala Arg Val Val Ala Gln His Gly Phe Leu Val Cys Trp Gln Leu Val 250 Gln Phe Gly Asp Gln Leu Phe Asn Arg Gln Ile Ser Glu Leu Trp Gln 260 265 Ala Phe Gln Arg Ser Ile Arg Val Val His Val Gly Leu Val Val Phe 280 Ser Val Met Asp Phe His Arg Leu Leu Val Glu Met Arg Phe Gln Cys 295 Val Val Gly Ile Arg Gln Gly Trp Gln Cys Ile Thr His Asn Pro Leu

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His Tyr Cys Arg Ala Ala Gln Leu Leu Met Pro Arg Lys Gln Leu Val
                325
                                    330
His Tyr Ser
            340
<210> 9984
<211> 383
<212> PRT
<213> Enterobacter cloacae
<400> 9984
Leu Pro Phe Lys Thr Lys Val Arg Gln Pro Ser Glu Gly Ser Gln Thr
                                    10
Ala Ser Phe Leu His Ser Ser Ser Arg Arg Glu Ala Ser Gly Tyr Lys
            20
                                25
Asn Asp Glu Asp Val Lys Met Asn His Ala Ile Thr Met Gly Ile Phe
                            40
Trp His Leu Ile Gly Ala Ala Ser Ala Ala Cys Phe Tyr Ala Pro Phe
                        55
Lys Lys Val Lys Gly Trp Ser Trp Glu Thr Met Trp Ser Val Gly Gly
65
                    70
                                        75
Thr Val Ser Trp Leu Ile Leu Pro Trp Thr Ile Ser Ala Met Leu Leu
                85
                                    90
Pro Asp Phe Trp Gly Tyr Phe Ser Ser Phe Asn Ala Ser Thr Leu Leu
                                105
                                                     110
            100
Pro Val Phe Leu Phe Gly Ala Met Trp Gly Ile Gly Asn Ile Asn Tyr
                            120
Gly Leu Thr Met Arg Tyr Leu Gly Met Ser Met Gly Ile Gly Ile Ala
                        135
                                             140
Ile Gly Ile Thr Leu Ile Val Gly Thr Leu Met Thr Pro Ile Leu Asn
                    150
                                        155
Gly Asn Phe Asp Val Leu Ile Asn Thr Gln Gly Gly Arg Met Thr Leu
                165
                                    170
Leu Gly Val Leu Val Ala Val Ile Gly Val Gly Ile Val Thr Arg Ala
            180
                                185
                                                     190
Gly Gln Leu Lys Glu Arg Lys Met Gly Ile Lys Ala Glu Glu Phe Asn
                            200
                                                 205
Leu Lys Lys Gly Leu Leu Ala Val Met Cys Gly Ile Phe Ser Ala
                        215
                                             220
Gly Met Ser Phe Ala Met Asn Ala Ala Lys Pro Met His Asp Ala Ala
                    230
                                        235
Ala Ala Leu Gly Val Asp Pro Leu Tyr Val Ala Leu Pro Ser Tyr Val
                                    250
Val Ile Met Gly Gly Gly Ala Leu Val Asn Leu Gly Phe Cys Phe Ile
                                265
Arg Leu Ala Lys Val Asn Asn Leu Ser Val Lys Ala Asp Phe Ser Leu
                            280
Ala Lys Pro Leu Ile Val Thr Asn Val Leu Leu Ser Ala Leu Gly Gly
                        295
Leu Met Trp Tyr Leu Gln Phe Phe Phe Tyr Ala Trp Gly His Ala Ser
                    310
                                        315
Ile Pro Ala Gln Tyr Asp Tyr Met Ser Trp Met Leu His Met Ser Phe
                325
                                    330
Tyr Val Leu Cys Gly Gly Leu Val Gly Leu Val Leu Lys Glu Trp Asn
            340
                                345
Asn Ala Gly Arg Arg Pro Val Gly Val Leu Ser Leu Gly Cys Val Val
                            360
Ile Ile Ile Ala Ala Asn Ile Val Gly Leu Gly Met Ala Asn
                        375
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<211> 197
<212> PRT
<213> Enterobacter cloacae
<400> 9985
Pro Met Gln Val Ser Arg Gln Phe Phe Lys Ile Cys Ala Gly Gly
                                    10
Met Ala Gly Thr Thr Ala Ala Ala Leu Gly Phe Ala Pro Gly Val Ala
                                25
Leu Ala Glu Thr Arg Gln Tyr Lys Leu Leu Arg Thr Arg Glu Thr Arg
                            40
Asn Thr Cys Thr Tyr Cys Ser Val Gly Cys Gly Leu Leu Met Tyr Ser
Leu Gly Asp Gly Ala Lys Asn Ala Lys Ala Ser Ile Phe His Ile Glu
                    70
                                        75
Gly Asp Pro Asp His Pro Val Asn Arg Gly Ala Leu Cys Pro Lys Gly
                                    90
Ala Gly Leu Val Asp Phe Ile His Ser Glu Ser Arg Leu Lys Phe Pro
                                105
Glu Tyr Arg Ala Pro Gly Ser Asp Lys Trp Gln Gln Ile Ser Trp Glu
                            120
Glu Ala Phe Asp Arg Ile Ala Lys Leu Met Lys Glu Asp Arg Asp Ala
                        135
                                            140
Asn Phe Ile Ala Lys Asn Ala Glu Gly Thr Thr Val Asn Arg Trp Leu
                    150
                                        155
Ser Thr Gly Met Leu Cys Ala Ser Ala Ser Ser Asn Glu Thr Gly Tyr
                165
                                    170
Leu Thr Gln Lys Phe Thr Arg Ala Leu Gly Met Leu Ala Val Asp Asn
            180
                                185
Gln Ala Arg Val
        195
<210> 9986
<211> 821
<212> PRT
<213> Enterobacter cloacae
<400> 9986
His Gly Pro Thr Val Ala Ser Leu Ala Pro Thr Phe Gly Arg Gly Ala
                                    10
Met Thr Asn His Trp Val Asp Ile Lys Asn Ala Asn Leu Ile Val Val
                                25
Met Gly Gly Asn Ala Ala Glu Ala His Pro Val Gly Phe Arg Trp Ala
Met Glu Ala Lys Ile His Asn Gly Ala Lys Leu Ile Val Ile Asp Pro
Arg Phe Thr Arg Thr Ala Ser Val Ala Asp Phe Tyr Thr Pro Ile Arg
Ser Gly Thr Asp Ile Thr Phe Leu Ser Gly Val Leu Leu Tyr Leu Met
                                    90
Thr Asn Glu Lys Tyr Asn Arg Glu Tyr Thr Glu Ala Tyr Thr Asn Ala
          100
                                105
                                                     110
Ser Leu Ile Val Arg Glu Asp Tyr His Phe Glu Asp Gly Leu Phe Ser
                            120
                                                125
Gly Tyr Asp Ala Glu Lys Arg Lys Tyr Asp Lys Thr Ser Trp Asn Tyr
                        135
                                            140
Glu Leu Asp Glu Asn Gly Phe Ala Lys Arg Asp Thr Thr Leu Gln His
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Pro Arg Cys Val Trp Asn Leu Leu Lys Glu His Val Ser Arg Tyr Thr

Pro Glu Val Val Glu Asn Ile Cys Gly Thr Pro Lys Ala Asp Phe Leu

155

180 185 190 Lys Val Cys Glu Leu Ile Ala Glu Thr Ser Ala Lys Asp Lys Thr Ala 195 200 205 Ser Phe Leu Tyr Ala Leu Gly Trp Thr Gln His Ser Ile Gly Ala Gln 215 220 Asn Ile Arq Thr Met Ala Met Val Gln Leu Leu Gly Asn Met Gly 230 235 Met Ala Gly Gly Val Asn Ala Leu Arg Gly His Ser Asn Ile Gln 245 250 Gly Leu Thr Asp Leu Gly Leu Leu Ser Gln Ser Leu Thr Gly Tyr Met 265 Asn Leu Pro Ser Glu Lys Gln Thr Asp Leu Gln Thr Tyr Leu Thr Ala 280 Ser Thr Pro Lys Pro Leu Leu Glu Gly Gln Val Asn Tyr Trp Gly Asn 295 Tyr Pro Lys Phe Phe Val Ser Leu Met Lys Ala Phe Tyr Gly Asp Lys 310 315 Ala Thr Ala Glu Asn Ser Trp Gly Phe Asp Trp Leu Pro Lys Trp Asp 325 330 Lys Gly Tyr Asp Val Leu Gln Tyr Phe Glu Met His Gln Gly Gln 340 345 Val Asn Gly Tyr Ile Cys Gln Gly Phe Asn Pro Val Ala Ser Phe Pro 355 360 365 Asn Lys Asn Lys Val Val Glu Ser Leu Ser Lys Leu Lys Phe Leu Val 370 375 380 Thr Ile Asp Pro Leu Asn Thr Glu Thr Ser Thr Phe Trp Gln Asn His 390 395 Gly Glu Ser Asn Asp Val Asp Pro Ser Lys Ile Gln Thr Glu Val Phe 405 410 Arg Leu Pro Ser Thr Cys Phe Ala Glu Glu Asn Gly Ser Ile Val Asn 425 420 Ser Gly Arg Trp Leu Gln Trp His Trp Lys Gly Ala Asp Ala Pro Gly 435 440 Ile Ala Leu Asn Asp Gly Glu Ile Leu Ala Gly Ile Phe Leu Arg Leu 455 460 Arg Lys Met Tyr Ala Ser Glu Gly Gly Ala Thr Pro Glu Pro Val Leu 470 475 Asn Met Thr Trp Asn Tyr Ser Thr Pro Glu Asn Pro Ala Pro Glu Glu 485 490 Val Ala Met Glu Ser Asn Gly Lys Ala Leu Ala Asp Val Ile Asp Pro 505 Ala Thr Gly Ala Val Leu Ala Lys Lys Gly Asp Gln Leu Ser Thr Phe 520 Ala His Leu Arg Asp Asp Gly Thr Thr Ser Ser Gly Cys Trp Ile Phe 535 540 Ala Gly Ser Trp Thr Pro Lys Gly Asn Gln Met Ala Asn Arg Asp Asn 550 555 Ala Asp Pro Ser Gly Leu Gly Asn Thr Leu Gly Trp Ala Trp Ala Trp 565 570 Pro Leu Asn Arg Arg Ile Leu Tyr Asn Arg Ala Ser Ala Asp Pro Gln 585 590 Gly Asn Pro Trp Asp Pro Lys Arg Gln Leu Leu Lys Trp Asp Gly Ala 600 605 Lys Trp Gly Gly Val Asp Ile Pro Asp Tyr Ser Thr Ala Ala Pro Gly 620 615 Ser Asp Val Gly Pro Phe Ile Met Gln Pro Glu Gly Met Gly Arg Leu 630 635 Phe Ala Ile Asp Lys Met Ala Glu Gly Pro Phe Pro Glu His Tyr Glu 645 650 Pro Phe Glu Thr Pro Leu Gly Thr Asn Pro Leu His Pro Asn Val Val 665

Ser Asn Pro Ala Ala Arg Ile Phe Lys Gly Asp Phe Glu Ala Leu Gly 680 685 Lys Lys Asp Lys Phe Pro Tyr Val Gly Thr Thr Tyr Arg Leu Thr Glu 695 700 His Phe His Tyr Trp Thr Lys His Ala Leu Leu Asn Ala Ile Ala Gln 710 715 Pro Glu Gln Phe Val Glu Ile Gly Glu Lys Leu Ala Asn Lys Leu Gly 725 730 Ile Ala His Gly Asp Thr Val Lys Val Ser Ser Asn Arg Gly Tyr Ile 745 740 Lys Ala Lys Ala Val Val Thr Lys Arg Ile Arg Thr Leu Asn Val His 755 760 Gly Gln Gln Val Asp Thr Ile Gly Ile Pro Ile His Trp Gly Tyr Glu 775 780 Gly Val Ala Lys Lys Gly Phe Ile Ala Asn Thr Leu Thr Pro Phe Val 790 795 Gly Asp Ala Asn Thr Gln Thr Pro Glu Phe Lys Ala Phe Leu Val Asn 805 810 Val Glu Lys Val

820

<210> 9987

<211> 305

<212> PRT

<213> Enterobacter cloacae

<400> 9987 Arg Arg Arg Leu Met Ala Tyr Gln Ser Gln Asp Ile Ile Arg Arg Ser 10 Ala Thr Asn Gly Phe Thr Pro Ala Pro Gln Ala Arg Asp His Gln Gln Glu Val Ala Lys Leu Ile Asp Val Thr Thr Cys Ile Gly Cys Lys Ala 40 Cys Gln Val Ala Cys Ser Glu Trp Asn Asp Ile Arg Asp Glu Val Gly His Asn Val Gly Val Tyr Asp Asn Pro Ala Asp Leu Thr Ala Lys Ser 75 Trp Thr Val Met Arg Phe Ser Glu Val Glu Gln Asn Asp Lys Leu Glu Trp Leu Ile Arg Lys Asp Gly Cys Met His Cys Ala Asp Pro Gly Cys 105 Leu Lys Ala Cys Pro Ser Glu Gly Ala Ile Ile Gln Tyr Ala Asn Gly 120 Ile Val Asp Phe Gln Ser Glu Gln Cys Ile Gly Cys Gly Tyr Cys Ile 135 140 Ala Gly Cys Pro Phe Asp Val Pro Arg Met Asn Pro Glu Asp Asn Arg 150 155 Val Tyr Lys Cys Thr Leu Cys Val Asp Arg Val Asn Val Gly Gln Glu 165 170 Pro Ala Cys Val Lys Thr Cys Pro Thr Gly Ala Ile His Phe Gly Ser 185 180 Lys Glu Asp Met Lys Thr Leu Ala Ala Glu Arg Val Gly Glu Leu Lys 200 205 Thr Arg Gly Tyr Asp Asn Ala Gly Leu Tyr Asp Pro Ala Gly Val Gly 215 220 Gly Thr His Val Met Tyr Val Leu His His Ala Asp Lys Pro Asn Leu 230 235 Tyr His Gly Leu Pro Glu Asn Pro Glu Ile Ser Ala Thr Val Lys Phe 245 250 Trp Lys Gly Ile Trp Lys Pro Leu Ala Ala Val Gly Phe Ala Ala Thr 265

Phe Ala Ala Ser Ile Phe His Tyr Val Gly Val Gly Pro Asn Arg Ala . 275 280 285 Glu Glu Glu Asp Asp Asn Leu His Glu Glu Lys Asp Glu Val Arg Lys 290 295 300

305

<210> 9988

<211> 293

<212> PRT

<213> Enterobacter cloacae

<400> 9988

Phe Ala Met Leu Ala Val Asp Gln Arg Glu Ala Met Arg Leu Met Phe 20 25 30

Ala Ala Gly Ala Pro Val Pro Val Thr Asp Gln His Leu Thr Asp 35 40 45

Phe Lys Val Asn Ala Ala Lys Ile Leu Ser Pro Tyr Ala Ser Ala Ile 50 55 60

Leu Val Asp Gln Gln Phe Cys Tyr Arg Gln Ile Val Gly Gln Gln Ala 65 70 75 80

Val Ala Lys Ser Cys Ala Met Ile Val Ala Ala Asp Glu Phe Ile Pro 85 90 95

Gly Asn Gly Ile Pro Val Asp Ser Val Ala Ile Asp Lys Asn Val Asp 100 105 110

Ala Gln Ala Val Lys Arg Asp Gly Gly Lys Ala Leu Lys Leu Leu Val 115 120 125

Leu Trp Arg Ser Asp Glu Asp Pro Gln Gln Arg Leu Glu Met Val Lys 130 135 140

Ala Phe Asn Thr Leu Cys His Asp Asn Gly Leu Leu Ser Ile Ile Glu 145 150 155 160 Pro Val Val Arg Pro Pro Arg Arg Gly Ala Ala Phe Asn Arg Glu Gln

165 170 175 Ala Ile Ile Asp Ala Ala Lys Glu Leu Gly Asp Ser Gly Ala Asp Leu

180 185 190

Tyr Lys Val Glu Met Pro Leu Phe Gly Lys Gly Thr Gln Glu Leu

195 200 205 Leu Ala Ala Ser Gln Lys Leu Asn Glu Asn Ile Ala Met Pro Trp Val

210 215 220

Ile Leu Ser Ser Gly Val Asp Asp Lys Leu Phe Pro Arg Ala Val Ser

225 230 235 240 Val Ala Met Gln Ala Gly Ala Ser Gly Phe Leu Ala Gly Arg Ala Val

245 250 255

Trp Ser Ser Val Ile Gly Leu Pro Asp Thr Glu Leu Met Leu Arg Asp
260 265 . 270

Ile Ser Val Pro Lys Leu Gln Arg Leu Gly Glu Ile Val Asp Glu Met 275 280 285

Met Ala Arg Arg 290

<210> 9989

<211> 679

<212> PRT

<213> Enterobacter cloacae

<400> 9989

25 20 Thr Ala Asp Ala Pro Cys Leu Trp Ile Gly Ala Gly Glu Ala Asp Ile 40 Glu Met Phe Arg Gly Asn Phe Ser Ile Lys Asp Lys Leu Asn Glu Lys 55 60 Ile Ala Leu Thr Asn Ala Thr Val Thr Gln Gln Ser Ala Gly Trp Ala 70 75 Ile Arg Phe Thr Arg Gly Asp Ala Val Ser Ala Thr Leu Leu Val Gly 85 90 Val Asp Ala Glu Gly Arg Leu Glu Leu Lys Leu Lys Asn Asp Ala Pro 105 Gly His Asn Arg Ile Trp Leu Arg Leu Ala Ala Gln Pro Glu Asp His 120 Ile Tyr Gly Cys Gly Glu Gln Phe Ser Tyr Phe Asp Leu Arg Gly Lys 135 140 Pro Phe Pro Leu Trp Thr Ser Glu Gln Gly Val Gly Arg Asn Lys Gln 150 155 Thr Tyr Val Thr Trp Gln Ala Asp Cys Lys Glu Asn Ala Gly Gly Asp 170 165 Tyr Tyr Trp Thr Phe Phe Pro Gln Pro Thr Phe Val Ser Thr Gln Lys 185 Tyr Tyr Cys His Val Asp Asn Ser Cys Tyr Met Asn Phe Asp Phe Ser 200 205 195 Ala Pro Asp Phe His Glu Leu Ala Phe Trp Glu Asp Asn Ala Thr Leu 215 220 Arg Phe Glu Cys Ala Glu Thr Tyr Val Asp Leu Leu Glu Lys Leu Thr 230 235 Gly Leu Leu Gly Arg Gln Pro Glu Leu Pro Asp Trp Val Tyr Asp Gly 250 245 Val Thr Leu Gly Ile Gln Gly Gly Thr Glu Val Cys Gln Gln Lys Leu 260 265 Asp Thr Met Arg Asn Gly Gly Val Lys Val Asn Gly Ile Trp Ala Gln 280 . 285 Asp Trp Ser Gly Ile Arg Met Thr Ser Phe Gly Lys Arg Val Met Trp 300 295 Asn Trp Lys Trp Asn Ser Ala Leu Tyr Pro Gln Leu Asp Thr Arg Ile 315 310 Ala Gln Trp Lys Glu Glu Gly Val Gln Phe Leu Ser Tyr Ile Asn Pro 325 330 Tyr Val Ala Ser Asp Lys Asp Leu Cys Glu Glu Ala Ala Lys Arg Gly 350 340 345 Tyr Leu Thr Lys Asn Ala Asp Gly Lys Asp Tyr His Val Glu Phe Gly 360 Glu Phe Tyr Ala Gly Val Ile Asp Leu Thr Asn Pro Ala Ala Tyr Asp 380 Trp Tyr Lys Glu Val Ile Lys Lys Asn Leu Ile Glu Leu Gly Cys Gly 390 395 Gly Trp Met Ala Asp Phe Gly Glu Tyr Leu Pro Thr Asp Thr Phe Leu 410 His Asn Gly Val Ser Ala Glu Ile Met His Asn Ala Trp Pro Ala Leu 420 425 Trp Ala Lys Cys Asn Tyr Glu Ala Leu Glu Glu Thr Gly Lys Leu Gly 440 445 435 Glu Ile Leu Phe Phe Met Arg Ala Gly Tyr Thr. Gly Ser Gln Lys His 455 460 Ser Val Met Met Trp Ala Gly Asp Gln Asn Val Asp Trp Ser Leu Asp 475 470 Asp Gly Leu Ala Ser Val Val Pro Ala Ala Leu Ser Leu Ala Met Thr 485 490 Gly His Gly Leu His His Ser Asp Ile Gly Gly Tyr Thr Thr Leu Phe 505





Glu Met Lys Arg Ser Lys Glu Leu Leu Leu Arg Trp Cys Asp Phe Ser 520 Ala Phe Thr Pro Met Met Arg Thr His Glu Gly Asn Arg Pro Gly Asp 540 535 Asn Trp Gln Phe Asp Gly Asp Ala Glu Thr Ile Ala His Phe Ala Arg 550 555 Met Thr Thr Val Phe Thr Thr Leu Lys Pro Tyr Thr Lys Ala Ala Val 570 Ala Gln Asn Ala Lys Ser Gly Leu Pro Val Met Arg Pro Leu Phe Leu 585 His Tyr Glu Asp Asp Ala Arg Ala Tyr Thr Leu Lys Tyr Gln Tyr Leu 600 Phe Gly Arg Asp Leu Leu Val Ala Pro Val His Glu Lys Gly Arg Arg 620 615 Asp Trp Ser Leu Tyr Leu Pro Gln Asp Thr Trp Val Asn Ala Trp Thr 635 630 Gly Glu Thr Cys Gln Gly Gly Asp Ile Thr Val Asp Ala Pro Leu Gly 650 Lys Pro Pro Val Phe Tyr Arg Gln Gln Ser Glu Trp Ala Asp Leu Phe 665 660 Ser Thr Leu Arg His Ile 675

<210> 9990

<211> 475

<212> PRT

<213> Enterobacter cloacae

<400> 9990 Gly Ser Pro Ala Gly Lys Pro Ala Gly Arg Arg Arg Thr Ile Met Ser 10 Gln His Thr Ser Asp Pro Ala Thr Leu Arg Leu Pro Phe Lys Glu Lys 20 Leu Ala Tyr Gly Met Gly Asp Leu Gly Ser Asn Ile Leu Leu Asp Ile Gly Thr Leu Tyr Leu Leu Lys Phe Tyr Thr Asp Val Leu Gly Leu Pro Gly Thr Tyr Gly Gly Ile Ile Phe Leu Ile Ala Lys Phe Phe Thr Ala 75 Phe Thr Asp Met Gly Thr Gly Ile Met Leu Asp Ser Arg Arg Lys Ile 85 Gly Pro Lys Gly Lys Phe Arg Pro Phe Val Leu Tyr Ala Ala Phe Pro 105 100 Val Thr Leu Leu Ala Ile Ala Asn Phe Val Gly Thr Pro Phe Glu Ile 120 Thr Gly Lys Thr Val Met Ala Thr Val Leu Phe Met Leu Tyr Gly Leu 135 130 Phe Phe Ser Met Met Asn Cys Ser Tyr Gly Ala Met Val Pro Ala Ile 150 Thr Lys Asn Pro Asp Glu Arg Ala Ser Leu Ala Ala Trp Arg Gln Gly 170. 165 Gly Ala Thr Leu Gly Leu Leu Cys Thr Val Gly Phe Val Pro Val 185 180 Met Asn Leu Ile Glu Gly Asn Asp Gln Leu Gly Tyr Ile Phe Ala Ala 200 Thr Leu Phe Ser Leu Phe Gly Leu Phe Phe Met Trp Trp Cys Tyr Lys 220 215 Gly Val Thr Glu Arg Tyr Val Glu Thr Gln Pro Ala Asn Pro Ala Gln 235 230 Lys Pro Gly Leu Leu Gln Ser Phe Arg Ala Ile Ala Gly Asn Arg Pro 250



Leu Phe Ile Leu Cys Ile Ala Asn Leu Cys Thr Leu Gly Ala Phe Asn 265 260 Val Lys Leu Ala Ile Gln Val Tyr Tyr Thr Gln Tyr Val Leu Asn Asp 285 280 Pro Ile Leu Leu Ser Tyr Met Gly Phe Phe Ser Met Gly Cys Ile Phe 300 295 Ile Gly Val Phe Met Met Pro Gly Ala Val Arg Arg Phe Gly Lys Lys 315 310 Lys Val Tyr Ile Ser Gly Leu Met Ile Trp Val Ala Gly Asp Leu Leu 330 325 Asn Tyr Phe Phe Gly Gly Ser Val Ser Phe Val Ala Phe Ser Cys 345 340 Leu Ala Phe Phe Gly Ser Ala Phe Val Asn Ser Leu Asn Trp Ala Leu 365 360 Val Ser Asp Thr Val Glu Tyr Gly Glu Trp Arg Thr Gly Val Arg Ser 380 375 Glu Gly Thr Val Tyr Thr Gly Phe Thr Phe Phe Arg Lys Val Ser Gln 395 390 Ala Leu Ala Gly Phe Phe Pro Gly Ile Met Leu Thr Gln Ile Gly Tyr 410 405 Val Pro Asn Val Val Gln Ser Ala Gly Thr Val Glu Gly Leu Arg Gln 425 420 Leu Ile Phe Ile Tyr Pro Ser Leu Leu Ala Val Ile Thr Ile Val Ala 440 435 Met Gly Cys Phe Tyr Asn Leu Asn Glu Lys Met Tyr Val Arg Ile Val 460 455 Glu Glu Ile Glu Leu Arg Lys Arg Thr Ala 470

<210> 9991

<211> 261

<212> PRT

<213> Enterobacter cloacae

<400> 9991

Ser Val Ser Ser His Phe Ile Thr Ile Asn Pro Ala Thr Met Ser Phe 10 Leu Phe Ile Arg Arg Glu Ala Phe Leu Tyr Leu Ile His Gly Gln Ile 25 Met Lys Arg Ile Ile Thr Val Leu Ile Val Ser Ser Val Ser Cys Pro 40 Val Phe Ala Gly Ala Tyr Val Glu Thr Arg Glu Ala Tyr Asn Thr Ala 55 Ser Glu Leu His Glu Val Ile Leu Arg Ala Gly Tyr Asn Phe Asp Met 75 70 Gly Ala Gly Leu Met Phe Thr Asn Ala Tyr Asn Val Gly Lys Trp Asp 90 Glu Leu Lys His Ser Tyr Asn Glu Ile Glu Gly Trp Tyr Pro Leu Phe 105 Lys Pro Thr Asp Lys Leu Thr Phe Gln Pro Gly Gly Leu Ile Asn Asp 125 120 Ser Ser Ala Gly Ser Gly Gly Ala Val Tyr Leu Asp Thr Asn Tyr Lys 140 135 Phe Thr Asp Trp Phe Asn Leu Thr Phe Arg Tyr Arg Tyr Asn His Asn 155 Asn Tyr Asp Thr Pro Asp Tyr Asn Gly Gln Met Asp Lys Asn Asp Thr 175 170 His Glu Phe Ala Asn Tyr Trp Asn Phe Lys Val Thr Asp Ala Phe Phe 190 185 Tyr Thr Phe Glu Pro His Phe Phe Gln Arg Val Asn Asp Tyr His Ser

5503 Lys Asn Gly Lys Asp His His Trp Glu Ile Thr Asn Lys Phe Ser Tyr 215 Lys Ile Asp Arg Asn Trp Leu Pro Tyr Leu Glu Leu Gln Trp Leu Asp 235 230 Arg Trp Asn Asp Tyr Asn Arg Glu Gln Tyr Arg Ile Arg Leu Gly Leu 250 Arg Tyr Ser Phe 260 <210> 9992 <211> 485 <212> PRT <213> Enterobacter cloacae <400> 9992 Arg Pro Arg Tyr His Asp Asp Asn Asp Gln Ser Gly Glu Leu Ser Met 10 Ser Ala Glu His Val Leu Thr Met Leu Asn Glu His Glu Val Lys Phe 25 20 Val Asp Leu Arg Phe Thr Asp Thr Lys Gly Lys Glu Gln His Val Thr 40 Ile Pro Ala His Gln Val Asn Ala Glu Phe Phe Glu Glu Gly Lys Met Phe Asp Gly Ser Ser Ile Gly Gly Trp Lys Gly Ile Asn Glu Ser Asp 75 Met Val Leu Met Pro Asp Ala Thr Thr Ala Leu Ile Asp Pro Phe Tyr 90 Glu Glu Pro Thr Leu Ile Ile Arg Cys Asp Ile Leu Glu Pro Gly Thr 105 100 Leu Gln Gly Tyr Asp Arg Asp Pro Arg Ser Ile Ala Lys Arg Ala Glu 125 120 115 Glu Tyr Leu Arg Ser Thr Gly Ile Ala Asp Thr Val Leu Phe Gly Pro 135 Glu Pro Glu Phe Phe Leu Phe Asp Asp Ile Arg Phe Gly Ala Ser Ile 155 150 Ser Gly Ser His Val Ala Ile Asp Asp Ile Glu Gly Ala Trp Asn Ser 170 165 Ser Thr Lys Tyr Glu Gly Gly Asn Lys Gly His Arg Pro Gly Val Lys 190 185 180 Gly Gly Tyr Phe Pro Val Pro Pro Val Asp Ser Ser Gln Asp Ile Arg 205 200 Ser Thr Met Cys Leu Ile Met Glu Glu Met Gly Leu Val Val Glu Ala 215 His His His Glu Val Ala Thr Ala Gly Gln Asn Glu Ile Ala Thr Arg 235 230 Phe Asn Thr Met Thr Lys Lys Ala Asp Glu Ile Gln Ile Tyr Lys Tyr 250 Val Val His Asn Val Ala His Arg Phe Gly Lys Thr Ala Thr Phe Met 265 Pro Lys Pro Met Phe Gly Asp Asn Gly Ser Gly Met His Cys His Met 280 Ser Leu Ser Lys Asn Gly Thr Asn Leu Phe Ser Gly Asp Lys Tyr Ala

Gly Leu Ser Glu Gln Ala Leu His Tyr Ile Gly Gly Val Ile Lys His 305 310 315 320 Ala Lys Ala Ile Asn Ala Leu Ala Asn Pro Thr Thr Asn Ser Tyr Lys 325 335 335

295

Arg Leu Val Pro Gly Tyr Glu Ala Pro Val Met Leu Ala Tyr Ser Ala
340
345

340
Arg Asn Arg Ser Ala Ser Ile Arg Ile Pro Val Val Ala Ser Pro Lys
355
360
365

Ala Arg Arg Ile Glu Val Arg Phe Pro Asp Pro Ala Ala Asn Pro Tyr 375 380 370 Leu Cys Phe Ala Ala Leu Leu Met Ala Gly Leu Asp Gly Ile Lys Asn 390 395 Lys Ile His Pro Gly Glu Ala Met Asp Lys Asn Leu Tyr Asp Leu Pro 405 410 Pro Glu Glu Ala Lys Glu Ile Pro Gln Val Ala Gly Ser Leu Glu Glu 425 420 Ala Leu Gln Ala Leu Asp Ala Asp Arg Glu Phe Leu Thr Ala Gly Gly 435 440 Val Phe Thr Asp Glu Ala Ile Asp Ala Tyr Ile Ala Leu Arg Thr Glu 455 460 Glu Asn Asp Arg Val Arg Met Thr Pro His Pro Val Glu Phe Glu Leu 475 470

Tyr Tyr Ser Val

485

<210> 9993

<211> 309

<212> PRT

<213> Enterobacter cloacae

<400> 9993

Ile Thr Met Thr Asp Ile Ser Arg Thr Gln Ala Trp Leu Glu Ser Leu Arg Pro Lys Thr Leu Pro Leu Ala Phe Ala Ala Ile Ile Val Gly Thr Thr Leu Ala Trp Trp Gln Gly His Phe Asp Pro Leu Val Ala Gly Leu Ala Leu Val Thr Ala Gly Leu Leu Gln Ile Leu Ser Asn Leu Ala Asn Asp Tyr Gly Asp Ala Val Lys Gly Ser Asp Lys Pro Asp Arg Ile Gly 70 75 Pro Leu Arg Gly Met Gln Lys Gly Val Ile Thr Gln Ala Gln Met Lys 90

Arg Ala Leu Ile Ile Thr Val Val Leu Ile Cys Leu Ser Gly Leu Ala 100 105 Leu Val Thr Val Ala Ser Lys Thr Thr Ser Asp Phe Ile Gly Phe Leu 115 120 Val Leu Gly Leu Leu Ala Ile Ile Ala Ala Ile Thr Tyr Thr Val Gly

135 Thr Arg Pro Tyr Gly Tyr Ile Gly Leu Gly Asp Ile Ser Val Leu Val 150 155

Phe Phe Gly Trp Leu Ser Val Met Gly Ser Trp Tyr Leu Gln Ala His 170 165

Thr Val Ile Pro Ala Leu Phe Leu Pro Ala Thr Ala Cys Gly Leu Leu 185 190 180

Ala Thr Ala Val Leu Asn Ile Asn Asn Leu Arg Asp Ile Asp Ser Asp 195 200 205

Arg Glu Asn Gly Lys Asn Thr Leu Ala Val Arg Leu Gly Pro Val Asn 215 220

Ala Arg Arg Tyr His Ala Phe Leu Leu Ile Gly Ala Leu Val Cys Leu 230 235

Ala Leu Phe Asn Leu Ile Ser Leu His Gly Leu Trp Gly Trp Leu Phe 245 250

Val Leu Ala Ala Pro Leu Leu Ile Lys Gln Ala Arg Tyr Val Met Arg 265

Glu Leu Ser Pro Ala Ala Met Pro Pro Met Leu Glu Arg Thr Val Lys 280 285

Gly Ala Leu Leu Thr Asn Leu Leu Phe Val Ile Gly Ile Val Leu Ser 295 300

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Gln Thr Leu Ser
305
<210> 9994
<211> 291
<212> PRT
<213> Enterobacter cloacae
<400> 9994
Thr Leu Leu Phe Cys Arg Ile Pro Ile Met Ser Gln Thr Ser Thr Leu
Lys Gly Gln Cys Ile Ala Glu Phe Leu Gly Thr Gly Leu Leu Ile Phe
                                 25
Phe Gly Val Gly Cys Val Ala Ala Leu Lys Val Ala Gly Ala Ser Phe
Gly Gln Trp Glu Ile Ser Ile Ile Trp Gly Leu Gly Val Ala Met Ala
                        55
Ile Tyr Leu Thr Ala Gly Val Ser Gly Ala His Leu Asn Pro Ala Val
                                         75
                    70
Thr Ile Ala Leu Trp Leu Phe Ala Cys Phe Asp Gly Arg Lys Val Val
                85
Pro Phe Ile Ile Ser Gln Phe Ala Gly Ala Phe Cys Ala Ala Ala Leu
            100
                                 105
Val Tyr Gly Leu Tyr Tyr Asn Leu Phe Ile Asp Phe Glu Gln Thr His
        115
                            120
                                                 125
His Met Val Arg Gly Ser Val Glu Ser Leu Asp Leu Ala Gly Ile Phe
                        135
                                             140
Ser Thr Tyr Pro Asn Pro His Ile Asn Phe Val Gln Ala Phe Ala Val
                    150
                                         155
Glu Met Val Ile Thr Ala Ile Leu Met Gly Val Ile Met Ala Leu Gly
                                     170
                165
Asp Asp Gly Asn Gly Ile Pro Arg Gly Pro Leu Ala Pro Leu Leu Ile
            180
                                 185
                                                     190
Gly Leu Leu Ile Ala Val Ile Gly Ala Ser Met Gly Pro Leu Thr Gly
                            200
Phe Ala Met Asn Pro Ala Arg Asp Leu Gly Pro Lys Thr Phe Ala Phe
                        215
                                             220
Phe Ala Gly Trp Gly Asp Val Ala Phe Thr Gly Gly Lys Asp Ile Pro
                    230
                                         235
Tyr Phe Leu Val Pro Leu Phe Gly Pro Ile Val Gly Ala Ala Leu Gly
                245
                                     250
Ala Phe Gly Tyr Arg Lys Leu Ile Gly Arg His Leu Pro Cys Asp Thr
                                 265
Cys Val Glu Glu Glu Lys Glu Thr Thr Ser Thr Thr Gln Gln Lys Ala
                             280
Ser Leu
    290
<210> 9995
<211> 510
<212> PRT
<213> Enterobacter cloacae
<400> 9995
Ser Asp Tyr Gly Thr His Thr Met Thr Glu Lys Lys Tyr Ile Val Ala
                                     10
Leu Asp Gln Gly Thr Thr Ser Ser Arg Ala Val Val Met Asp His Asp
            20
                                25
Ala Asn Ile Val Ser Val Ser Gln Arg Glu Phe Glu Gln Ile Tyr Pro
                            40
Arg Pro Gly Trp Val Glu His Asp Pro Met Glu Ile Trp Ala Ser Gln
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60 55 Ser Ser Thr Leu Val Glu Val Leu Ala Lys Ala Asp Ile Ser Ser Asp 70 75 Gln Ile Ala Ala Ile Gly Ile Thr Asn Gln Arg Glu Thr Thr Val Val 85 90 Trp Glu Arg Glu Thr Gly Lys Pro Ile Tyr Asn Ala Ile Val Trp Gln 100 105 Cys Arg Arg Thr Ser Glu Ile Cys Glu Gln Leu Lys Arg Asp Gly Met 120 125 Glu Glu Tyr Val Arg Ser Ala Thr Gly Leu Val Val Asp Pro Tyr Phe 135 Ser Gly Thr Lys Val Lys Trp Ile Leu Asp His Val Glu Gly Ser Arg 150 155 Glu Arg Ala Arg Gly Glu Leu Leu Phe Gly Thr Val Asp Thr Trp 165 170 Leu Ile Trp Lys Met Thr Gln Gly Arg Val His Val Thr Asp Tyr Thr 180 185 Asn Ala Ser Arg Thr Met Leu Phe Asn Ile Asn Thr Leu Glu Trp Asp 200 205 Asp Lys Met Leu Asp Ala Leu Asp Ile Pro Arg Ala Met Leu Pro Asp 215 220 Val Arg Lys Ser Ser Glu Val Tyr Gly Gln Thr Asn Ile Gly Gly Lys 230 235 Gly Gly Thr Arg Ile Pro Ile Ala Gly Ile Ala Gly Asp Gln Gln Ala 245 250 Ala Leu Phe Gly Gln Leu Cys Val Lys Glu Gly Met Ala Lys Asn Thr 260 265 Tyr Gly Thr Gly Cys Phe Met Leu Met Asn Thr Gly Glu Lys Ala Val 275 280 Lys Ser Glu Asn Gly Leu Leu Thr Thr Ile Ala Cys Gly Pro Arg Gly 295 300 Glu Val Asn Tyr Ala Leu Glu Gly Ala Val Phe Met Ala Gly Ala Ser 310 315 Ile Gln Trp Leu Arg Asp Glu Met Lys Leu Ile Ser Asp Ala Phe Asp 325 330 Ser Glu Tyr Phe Ala Thr Lys Val Lys Asp Thr Asn Gly Val Tyr Val 340 345 Val Pro Ala Phe Thr Gly Leu Gly Ala Pro Tyr Trp Asp Pro Tyr Ala 360 365 Arg Gly Ala Ile Phe Gly Leu Thr Arg Gly Val Asn Ser Asn His Ile 370 375 380 Ile Arg Ala Thr Leu Glu Ser Ile Ala Tyr Gln Thr Arg Asp Val Leu 390 395 Glu Ala Met Gln Ala Asp Ser Gly Ile Arg Leu His Ala Leu Arg Val 410 Asp Gly Gly Ala Val Ala Asn Asn Phe Leu Met Gln Phe Gln Ser Asp 425 Ile Leu Gly Thr Arg Val Glu Arg Pro Glu Val Arg Glu Val Thr Ala 440 Leu Gly Ala Ala Tyr Leu Ala Gly Leu Ala Val Gly Phe Trp Gln Asn 455 460 Leu Asp Glu Leu Gln Glu Lys Ala Val Ile Glu Arg Glu Phe Arg Pro 470 475 Gly Ile Glu Thr Thr Glu Arg Asn Tyr Arg Tyr Ser Gly Trp Lys Lys 485 490 Ala Val Lys Arg Ala Leu Ala Trp Glu Glu His Asp Glu 505 510

<sup>.&</sup>lt;210> 9996

<sup>&</sup>lt;211> 342

<sup>&</sup>lt;212> PRT

#### <213> Enterobacter cloacae

<400> 9996 Leu Tyr Glu Tyr Leu Met Lys Arg Glu Leu Ala Ile Glu Phe Ser Arg 10 Val Thr Glu Ala Ala Ala Leu Ala Gly Tyr Lys Trp Leu Gly Arg Gly 20 25 30 Asp Lys Asn Thr Ala Asp Gly Ala Ala Val His Ala Met Arg Ile Val 40 Leu Asn Gln Val Asn Ile Asp Gly Thr Ile Val Ile Gly Glu Gly Glu 55 Ile Asp Glu Ala Pro Met Leu Tyr Ile Gly Glu Lys Val Gly Thr Gly 75 70 Lys Gly Asp Ala Val Asp Ile Ala Val Asp Pro Ile Glu Gly Thr Arg 90 Met Thr Ala Met Gly Gln Ala Asn Ala Leu Ala Val Leu Ala Val Gly 105 Asp Lys Gly Cys Phe Leu Asn Ala Pro Asp Met Tyr Met Glu Lys Leu 120 Ile Val Gly Pro Gly Ala Lys Gly Ala Ile Asp Leu Ser Leu Pro Leu 135 140 Asp Ala Asn Leu Arg Asn Ile Ala Ala Ala Leu Gly Lys Ala Leu Ser 150 155 Glu Leu Thr Val Thr Ile Leu Ala Lys Pro Arg His Asp Ala Thr Ile 170 165 Ala Tyr Leu Gln Thr Leu Gly Val Arg Val Phe Ala Ile Pro Asp Gly 180 185 Asp Val Ala Ala Ser Ile Leu Thr Cys Met Pro Asp Ser Glu Val Asp 200 205 Val Leu Tyr Gly Ile Gly Gly Ala Pro Glu Gly Val Val Ser Ala Ala 215 220 Val Ile Arg Ala Leu Asp Gly Asp Met Gln Ala Arg Leu Leu Pro Arg 230 235 His Glu Val Lys Gly Asp Ser Asp Glu Asn Leu Arg Ile Gly Ala Asp 245 250 Glu Leu Ala Arg Cys Ala Ala Met Gly Ile Glu Ala Asn Lys Val Leu 265 270 260 Ala Leu Asn Glu Met Ala Arg Ser Asp Asn Val Val Phe Ser Ala Thr 280 285 Gly Ile Thr Lys Gly Asp Leu Leu Asp Gly Ile Thr Arg Lys Gly Asn 295 Met Ala Thr Thr Glu Thr Leu Leu Ile Arg Gly Lys Ser Arg Thr Ile 310 315 Arg Arg Ile Lys Ser Ile His Tyr Leu Asp Arg Lys Asp Pro Asp Val 325 330 Gln Thr His Ile Leu 340

<210> 9997

<211> 258

<212> PRT

<213> Enterobacter cloacae

## <400> 9997

Lys Arg Glu Thr Ala Gln Glu Lys Ile Met Ala Asp Trp Val Thr Gly 1 5 10 15 15 Lys Val Thr Lys Val Gln Phe Trp Thr Asp Ala Leu Phe Ser Leu Thr 20 25 30 Leu His Ala Pro Val His Pro Phe Thr Ala Gly Gln Phe Ala Lys Leu 35 40 45 Gly Leu Asp Ile Asp Gly Glu Arg Val Gln Arg Ala Tyr Ser Tyr Val

60 55 Asn Ala Pro Asp Asn Pro Asp Leu Glu Phe Tyr Leu Val Thr Val Pro 75 70 Asp Gly Lys Leu Ser Pro Arg Leu Ala Ala Leu Lys Pro Gly Asp Glu 85 90 Val Gln Ile Val Ser Asp Ala Ala Gly Phe Phe Val Leu Asp Glu Ile 100 105 Pro Asp Cys Asp Thr Leu Trp Met Leu Ala Thr Gly Thr Ala Ile Gly 120 Pro Tyr Leu Ser Ile Leu Gln Tyr Gly Lys Asp Leu Glu Arg Phe Lys 135 Asn Ile Val Leu Val His Ala Ala Arg Tyr Ala Ala Asp Leu Ser Tyr 150 Leu Pro Gln Met Gln Ala Leu Glu Gln Arg Tyr Gly Gly Lys Leu Lys 165 170 Ile Gln Thr Val Val Ser Arg Glu Thr Ala Ala Gly Ser Leu Thr Gly 180 185 Arg Val Pro Ala Leu Ile Glu Ser Gly Ala Leu Glu Glu Ala Val Gly 200 Leu Pro Met Asn Thr Glu Thr Ser His Val Met Leu Cys Gly Asn Pro 220 215 210 Gln Met Val Arg Asp Thr Gln Gln Leu Leu Lys Asp Thr Arg Gln Met 235 230 Thr Lys His Leu Arg Arg Pro Gly His Met Thr Ala Glu His Tyr 250 245

<210> 9998

<211> 424 <212> PRT

<213> Enterobacter cloacae

<400> 9998

Gly Ala Leu Arg Met Thr Thr Gln Leu Glu Gln Ala Trp Asp Leu Ala Lys Gln Arg Phe Ala Ala Val Gly Val Asp Val Glu Glu Ala Leu Arg Gln Leu Asp Arg Leu Pro Val Ser Met His Cys Trp Gln Gly Asp Asp Val Ala Gly Phe Glu Asn Pro Gly Gly Ser Leu Thr Gly Gly Ile Gln Ala Thr Gly Asn Tyr Pro Gly Lys Ala Arg Asn Ala Thr Glu Leu Arg Ala Asp Leu Glu Leu Ala Leu Ser Leu Ile Pro Gly Pro Lys Arg Leu Asn Leu His Ala Ile Tyr Leu Glu Ser Asp Glu Pro Val Ala Arg Asn 100 105 110 Glu Ile Lys Pro Glu His Phe Thr Asn Trp Val Ala Trp Ala Lys Ala 120 115 125 Asn Arg Leu Gly Leu Asp Phe Asn Pro Ser Cys Phe Ser His Pro Leu 135 140 Ser Ala Asp Gly Phe Thr Leu Ala His Ala Asn Asp Glu Ile Arg Gln 150 155 Phe Trp Ile Asp His Val Lys Ala Ser Arg Arg Val Ser Ala Tyr Phe 165 170 Gly Glu Gln Leu Gly Thr Pro Ser Val Met Asn Ile Trp Ile Pro Asp 185 190 Gly Met Lys Asp Ile Thr Val Asp Arg Leu Ala Pro Arg Gln Arg Leu 200 205 Leu Ala Ala Leu Asp Glu Ala Ile Ser Glu Lys Leu Asp Pro Ala His

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210
                        215
                                            220
His Ile Asp Ala Val Glu Ser Lys Leu Phe Gly Ile Gly Ala Glu Ser
                   230
                                      235
Tyr Thr Val Gly Ser Asn Glu Phe Tyr Met Gly Tyr Ala Thr Ser Arg
                                   250
               245
Gln Thr Ala Leu Cys Leu Asp Ala Gly His Phe His Pro Thr Glu Val
                                265
Ile Ser Asp Lys Ile Ser Ala Ala Met Leu Tyr Val Pro Arg Leu Leu
                            280
Leu His Val Ser Arg Pro Val Arg Trp Asp Ser Asp His Val Val Leu
                        295
Leu Asp Asp Glu Thr Gln Ala Ile Ala Ser Glu Ile Ile Arg His Asn
                    310
                                        315
Leu Phe Asp Arg Val His Ile Gly Leu Asp Phe Phe Asp Ala Ser Ile
                325
                                    330
Asn Arg Ile Ala Ala Trp Val Ile Gly Thr Arg Asn Met Lys Lys Ala
            340
                                345
Leu Leu Arg Ala Leu Leu Glu Pro Val Ala Ala Leu Lys Gln Leu Glu
                                                365
                            360
Glu Asn Gly Asp Tyr Thr Ala Arg Leu Ala Leu Leu Glu Glu Gln Lys
                        375
                                            380
Ser Leu Pro Trp Gln Ala Val Trp Glu Met Tyr Cys Gln Arg His Asp
                                        395
                    390
Ala Pro Ala Gly Ser Gln Trp Leu Asp Asn Val Arg Ala Tyr Glu Lys
                405
                                    410
Glu Val Leu Ala Ala Arg Gln
            420
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<210> 9999

<211> 309

<212> PRT

<213> Enterobacter cloacae

<400> 9999

Lys Thr Ser Pro Gly Gly Ala Leu Leu Ala Gly Pro Thr Asp Lys Thr 10 Arg Pro Gly Lys Arg Asn Ala Thr Arg His Phe Gln Arg Asn Tyr Ser 20 25 Met Gln Thr Ile Thr Thr Ser Trp Phe Val Gln Gly Met Ile Lys Ala 40 Thr Ser Asp Ala Trp Leu Lys Gly Trp Asp Glu Arg Asn Gly Gly Asn Leu Thr Leu Arg Leu Asp Asp Ala Asp Ile Glu Pro Phe Ala Ser Asp 70 Phe His Gln Lys Pro Arg Tyr Ile Ala Leu Ser Gln Pro Met Pro Leu Leu Ala Asn Thr Pro Phe Ile Val Thr Gly Ser Gly Lys Phe Phe Arg 105 Asn Val Gln Leu Asp Pro Glu Ala Asn Leu Gly Val Val Lys Val Asp 120 Ser Asp Gly Ala Gly Tyr His Ile Leu Trp Gly Leu Thr Asp Asp Ala 130 135 140 Val Pro Thr Ser Glu Leu Pro Ala His Phe Leu Ser His Cys Glu Arg 150 155 Ile Lys Ala Thr Asn Gly Lys Asp Arg Val Ile Met His Cys His Ala 170 165 Thr Asn Leu Ile Ala Leu Thr Tyr Val Leu Glu Asn Asn Ser Asp Phe 180 185 190 Phe Thr Arg Lys Leu Trp Glu Gly Ser Thr Glu Cys Leu Val Val Phe 200 Pro Asp Gly Val Gly Ile Leu Pro Trp Met Val Pro Gly Thr Asp Glu

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210
                        215
                                            220
Ile Gly Gln Ala Thr Ala Thr Asp Met Gln Lys His Ser Leu Val Leu
                   230
                                       235
Trp Pro Phe His Gly Val Phe Gly Ser Gly Pro Thr Leu Asp Glu Thr
                                    250
               245
Phe Gly Leu Ile Asp Thr Ala Glu Lys Ser Ala Glu Val Leu Val Lys
            260
                               265
Val Tyr Ser Met Gly Gly Met Lys Gln Thr Ile Thr Arg Glu Glu Leu
                            280
Ile Ala Leu Gly Lys Arg Phe Gly Val Thr Pro Met Gln Ser Ala Leu
                        295
Asp Leu Tyr Gln
305
<210> 10000
<211> 424
<212> PRT
<213> Enterobacter cloacae
<400> 10000
Ile Ala Gly Gly Ser Leu Arg Asp Trp Arg Asp Gln His His Gly
Arg His Arg Pro Arg Ala Arg Leu Ser Val Arg Gly Ala Val Pro Trp
            20
Arg His Gln Gln Arg Pro Ala Gly Asp Arg Leu Pro Val Leu Ala
                            40
Asp Gly Asp Phe Arg Leu Gly His Cys His Arg Cys Ala Ala Glu Arg
                        55
                                            60
Ala Arg Gln Gln Ala Gln Arg Gln Ala Asp Pro Ala Arg Arg Gly Ala
                    70
                                        7.5
Gly Thr Ser Glu Thr Gly Gly Glu Thr Met Ser Lys Met Met Thr Ser
Glu Glu Phe Lys Pro Thr Ser Ala Pro Gly Ile Phe Gln Arg Leu Leu
            100
                                105
                                                    110
Cys Trp Glu Gly Phe Leu Leu Ala Val Thr Leu Ala Val Phe Val Val
                            120
Asn Ala Leu Ala Ser Pro Tyr Phe Leu Asn Ile Trp Asn Leu Ser Asp
                        135
                                            140
Ala Thr Phe Asn Phe Thr Glu Lys Ala Ile Ile Val Leu Pro Met Ala
                    150
                                        155
Met Leu Ile Ile Ala Arg Glu Ile Asp Leu Ser Val Ala Ser Thr Ile
                165
                                    170
Ala Leu Ser Ser Thr Val Met Gly Phe Cys Ala Ala Ala Gly Val Asp
                                185
Thr Pro Leu Leu Val Cys Val Gly Leu Gly Val Gly Leu Leu Cys Gly
                            200
Leu Phe Asn Gly Ile Leu Val Thr Arg Phe Asn Leu Ser Ser Ile Val
                        215
Ile Thr Ile Gly Thr Met Ser Leu Tyr Arg Gly Ile Thr Tyr Ile Leu
                    230
                                        235
Leu Gly Asp Gln Ala Leu Asn Ser Tyr Pro Glu Ser Phe Ala Trp Phe
                245
                                    250
Gly Gln Gly Tyr Val Trp Gly Ala Leu Ser Phe Glu Phe Ala Leu Phe
            260
                                265
                                                    270
Ile Val Leu Ala Ala Leu Phe Ala Phe Val Leu His Arg Thr Asn Phe
                            280
Gly Arg Arg Thr Tyr Ala Ile Gly Asn Asn Pro Thr Gly Ala Trp Tyr
                        295
                                            300
Ser Gly Ile Asn Val Lys Arg His Asn Leu Ile Leu Phe Ala Leu Val
                    310
                                        315
Gly Leu Met Ser Gly Leu Ala Ser Val Leu Leu Thr Ser Arg Leu Gly
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325 330 Ser Thr Arg Pro Thr Ile Ala Met Gly Trp Glu Leu Ala Val Val Thr 340 345 Met Ala Val Leu Gly Gly Val Asn Ile Leu Gly Gly Ser Gly Ser Met 360 365 Val Gly Val Ile Ile Ala Ala Phe Leu Met Gly Leu Val Thr Phe Gly 375 Leu Ser Leu Leu Asn Val Pro Gly Ile Val Met Ser Val Ile Ile Gly 390 395 Ala Met Leu Ile Val Val Ile Ser Leu Pro Ile Ile Thr Arg Arg Ile 405 410 Met Gln Arg Arg Ile Ser 420

<210> 10001 <211> 114 <212> PRT <213> Enterobacter cloacae

<400> 10001 Gly Pro Arg Ala Val Pro Gly Gly Phe Met Ile Arg Lys Ala Phe Val Met Gln Val Asn Pro Asp Ala His Glu Glu Tyr Ala Arg Arg His Asn 20 25 30 Pro Ile Trp Pro Glu Leu Glu Ala Val Leu Lys Ala His Gly Ala His 35 40 His Tyr Ala Ile Tyr Leu Asp Lys Ala Arg Asn Leu Leu Phe Ala Thr 50 55 60 Val Glu Ile Glu Ser Glu Glu Arg Trp Asn Ala Val Ala Asn Thr Asp 70 75 Val Cys Gln Arg Trp Trp Lys His Met Ala Asp Val Met Pro Ser Asn 85 90 Pro Asp Asn Ser Pro Val Ser Ala Ala Leu Asn Glu Val Phe Tyr Leu 100 105

Asp

<210> 10002 <211> 310 <212> PRT <213> Enterobacter cloacae

<400> 10002

Met Ser Ile Arg Ile Ile Pro Gln Asp Glu Leu Gly Ser Ser Glu Lys Arg Thr Ala Glu Tyr Ile Pro Pro Leu Leu Phe Pro Arg Leu Lys Asn Leu Tyr Asn Arg Arg Ala Glu Arg Leu Arg Glu Leu Ala Glu Asn Asn 45 Pro Leu Gly Asp Phe Leu Arg Phe Ala Ala Leu Val Ala His Ala Gln 55 Glu Val Val Leu Tyr Asp His Pro Leu Gln Met Asp Leu Thr Ala Arg 70 75 Ile Lys Glu Ala Asn Glu Gln Gly Lys Pro Pro Leu Asp Ile His Val 85 90 Leu Pro Arg Asp Lys His Trp His Lys Leu Leu His Ser Leu Ile Ala 105 Glu Leu Lys Pro Glu Met Ser Gly Thr Ala Leu Ala Val Ile Glu Asn 120 125 Leu Glu Lys Ala Ser Glu Gln Glu Leu Glu Glu Met Ala Ser Ala Leu 135

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Phe Ala Ser Asp Phe Ser Leu Val Ser Ser Asp Lys Ala Pro Phe Ile
                   150
                                       155
Trp Ala Ala Leu Ser Leu Tyr Trp Ala Gln Met Ala Ser Leu Ile Pro
                165
                                    170
Gly Lys Ala Arg Ala Glu Tyr Gly Glu Ala Arg Gln Phe Cys Pro Val
            180
                                185
                                                    190
Cys Gly Ser Met Pro Val Ser Ser Met Val Gln Ile Gly Thr Thr Gln
                            200
                                                205
Gly Leu Arg Tyr Leu His Cys Asn Leu Cys Glu Thr Glu Trp His Val
                        215
                                            220
Val Arg Val Lys Cys Ser Asn Cys Glu Gln Thr Arg Asp Leu Asn Tyr
                    230
                                        235
Trp Ser Leu Glu Asn Glu Asp Ala Ala Val Lys Ala Glu Ser Cys Gly
                                    250
                245
Asp Cys Gly Thr Tyr Leu Lys Ile Leu Tyr Gln Glu Lys Asp Pro Lys
                                265
            260
Val Glu Ala Val Ala Asp Asp Leu Ala Ser Leu Ile Leu Asp Ala Lys
        275
                            280
Met Glu Gln Glu Gly Phe Ala Arg Ser Ser Ile Asn Pro Phe Leu Phe
    290
                        295
                                            300
Pro Gly Glu Gly Glu
                    310
305
<210> 10003
<211> 318
<212> PRT
<213> Enterobacter cloacae
<400> 10003
Ser Cys Thr Phe Ile Gln Leu Lys Gly Val Phe Met Ala Leu Glu Lys
                                    10
Gly Ile Glu Arg Leu Val Gln Gly Phe Ile Ala Ala Gly Arg Pro Ser
Ser Arg Arg Gln Thr Ile Glu Val Arg Arg Ala Gly Tyr Ile Ala Ser
                            40
Thr Glu Leu Ala Gly Lys Thr Glu Thr Arg Val Gln Leu Glu Thr Leu
Val Leu Glu Gly Leu Thr Ile Arg Val Phe Ser Pro Leu Asn Ala Pro
Glu Ile Leu Pro Ala Ala Ile Tyr Tyr His Gly Gly Cys Phe Ile Ser
                                    90
Gly Gly Phe Asp Thr His Asp Asn Gln Leu Arg Gln Leu Ala Tyr Tyr
                                105
Gly Asn Cys Arg Val Ile Ala Ile Gln Tyr Arg Leu Ala Pro Glu His
                            120
        115
Thr Phe Pro Ala Ala His Asp Asp Ala Glu Arg Gly Ala Asn Leu Val
                        135
                                            140
Trp Gln Tyr Ala Asp Glu Leu Gly Val Asp Lys Asn Arg Leu Thr Leu
                    150
                                        155
Cys Gly Asp Ser Ala Gly Gly His Leu Ala Leu Val Thr Ser Leu Arg
                165
                                    170
Leu Lys Ala Lys Gly Leu Trp Asp Pro Ala Gln Leu Ile Leu Ile Tyr
                                185
           180
                                                     190
Pro Met Leu Asp Ala Thr Ala Ser Leu Glu Ser Tyr Thr Leu Asn Gly
                            200
Met Asp Tyr Val Ile Thr Arg Asp Thr Leu Leu Ser Gly Tyr Glu Met
                       215
                                            220
Tyr Leu Ala Gly Ala Asp Arg Gln His Pro Glu Val Ser Pro Leu Trp
                   230
                                        235
Arg Asn Asp Phe Ser Gly Leu Pro Lys Val His Ile Val Thr Ala Glu
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250

<400> 10005

Tyr Asp Pro Leu Arg Asp Glu Gly Glu Ala Leu Tyr Gln Arg Leu Thr 260 265 270 Ala Gln Gly Val Lys Cys Thr Ala Gln Gln Trp Arg Gly Val Ile His 280 285 Gly Phe Phe Gln Leu Gly Gly Ile Ser Gln Ser Ala Arg Asp Ile Met 295 Arg Asp Ile Ala Trp Arg Ile Asn His Ala Gly Arg Glu 310 <210> 10004 <211> 301 <212> PRT <213> Enterobacter cloacae <400> 10004 Gln Glu Arg Gly Met Ser Ala Ile Ala Phe Ile Gly Leu Gly Gln Met Gly Ala Pro Met Ala Lys Asn Leu Leu Lys Gln Gly His Gln Leu Asn Val Phe Asp Val Asn Pro Gln Ala Ile Gln Ala Leu Val Glu Ser Gly 35 40 Ala Arg Ala Ala Ala Thr Pro Ala Gln Ala Ala Thr Asp Ala Glu Phe 55 Val Ile Thr Met Leu Pro Asn Gly Asp Leu Val Arg Ser Val Leu Phe 75 70 Gly Glu His Gly Val Cys Glu Gly Leu Ser Arg Asp Ala Leu Val Ile 85 90 Asp Met Ser Thr Ile His Pro Leu Gln Thr Asp Ala Leu Ile Arg Asp 100 105 Met Ala Glu Gln Gly Phe Ser Leu Met Asp Val Pro Val Gly Arg Thr 120 Ser Asp His Ala Ile Ala Gly Thr Leu Leu Leu Ala Gly Gly Thr 135 140 Ala Gln Gln Val Glu Arg Ala Thr Pro Val Leu Met Ala Met Gly Asn 150 155 Glu Leu Ile Asn Ala Gly Gly Pro Gly Met Gly Ile Arg Val Lys Leu 170 Ile Asn Asn Tyr Met Ser Ile Ala Leu Asn Ala Leu Ser Ala Glu Ala Ala Val Leu Cys Glu Ala Leu Gly Leu Ser Phe Asp Val Ala Leu Lys 200 Val Met Ser Gly Thr Pro Ala Gly Lys Gly His Phe Thr Thr Ser Trp 215 Pro Asn Lys Val Leu Lys Gly Asp Leu Ser Pro Ala Phe Met Ile Asp 230 235 Leu Ala His Lys Asp Leu Gly Ile Ala Leu Asp Val Ala Asn Gln Leu 245 250 His Val Pro Met Pro Leu Gly Ala Ala Ser Arg Glu Val Tyr Asn Gln 260 265 Ala Arg Ala Ala Gly Arg Gly Arg Glu Asp Trp Thr Ala Ile Leu Glu 280 Gln Val Arg Ala Ser Ala Gly Leu Lys Lys Ser His 295 <210> 10005 <211> 478 <212> PRT <213> Enterobacter cloacae

Gly Ser Thr Met Thr His Asn Thr Asp Pro Leu Thr Leu Lys Leu Ser

10 Leu Arg Glu Lys Cys Ala Tyr Gly Met Gly Asp Phe Gly Ser Asn Leu 20 25 Met Leu Cys Ile Gly Thr Leu Tyr Leu Leu Lys Phe Tyr Thr Asp Glu 40 45 Leu Gly Met Pro Ala Phe Tyr Gly Gly Ile Ile Phe Leu Val Ala Lys 55 Phe Phe Thr Ala Phe Thr Asp Met Leu Thr Gly Val Leu Leu Asp Ser 70 75 Arg Arg Asn Ile Gly Ala Arg Gly Lys Phe Arg Pro Phe Ile Leu Tyr 90 Ala Ser Val Pro Val Ala Leu Val Ala Thr Ala Gln Phe Met Ala Asn 105 Asp Phe Ser Leu Thr Val Lys Thr Ala Leu Ala Thr Val Leu Phe Met 120 125 Met Phe Gly Leu Cys Tyr Ser Leu Met Asn Cys Ala Tyr Gly Ala Met 135 140 Val Pro Ala Ile Thr Lys Asn Pro Asn Glu Arg Ala Gln Leu Ala Ala 150 155 Trp Arg Gln Gly Gly Ala Thr Val Gly Leu Leu Cys Thr Val Gly 170 165 Phe Met Pro Ile Gln Ala Leu Phe Val Ser Gln Pro Ser Leu Gly Tyr 180 185 Leu Val Ala Ala Leu Val Phe Val Thr Gly Gly Leu Phe Cys Met Trp 200 Trp Cys Tyr Ser Gly Val Lys Glu Arg Tyr Val Glu Leu Thr Pro Asp 210 215 220 His His Lys Pro Gly Ile Leu Lys Ser Phe Cys Ala Ile Phe Arg Asn 230 235 Pro Pro Leu Leu Val Leu Cys Ile Ala Asn Leu Cys Thr Leu Ala Ala 245 250 Phe Asn Ile Lys Leu Ala Ile Gln Val Tyr Tyr Thr Gln Tyr Val Leu 260 265 270 Asn Asp Val His Leu Leu Ser Trp Met Gly Phe Phe Ser Met Gly Cys 275 280 Ile Leu Ile Gly Val Phe Leu Val Pro Gly Ala Val Lys Arg Phe Gly 295 300 Lys Lys Pro Val Tyr Leu Gly Gly Leu Thr Leu Trp Ala Val Gly Asp 310 315 Val Leu Asn Phe Val Trp Gly Thr Ser Ser Leu Leu Phe Val Leu Phe 325 330 Ser Cys Met Ala Phe Phe Gly Thr Ala Phe Val Asn Ser Leu Asn Trp Ala Leu Val Pro Asp Thr Val Asp Tyr Gly Glu Trp Lys Thr Gly Ile 360 Arg Ala Glu Gly Ser Val Tyr Thr Gly Tyr Thr Phe Ser Arg Lys Ile 375 Ser Ala Ala Leu Ala Gly Phe Leu Pro Gly Ile Met Leu Thr Gln Ile 390 395 Gly Tyr Val Pro His Ala Val Gln Ser Ala Gly Thr Leu Leu Gly Leu 410 Arg Gln Leu Ile Phe Leu Trp Pro Cys Gly Leu Ala Ile Val Ala Ala 425 430 Val Thr Met Gly Leu Phe Tyr Lys Leu Asn Glu Ala Arg Phe Ala Phe 440 445 Ile Ile Glu Glu Ile Gly Lys Arg Lys Lys Gln Thr Ala Asn Thr Pro 455 460 Glu Ile Thr Thr Asn Asn Lys Ala Ser Ala Val Thr Leu

<211> 477 <212> PRT

<213> Enterobacter cloacae

<400> 10006 Lys Ile Lys Val Thr Phe Met Gln Arg Gly Ile Val Trp Val Val Asp 10 Asp Asp Ser Ser Ile Arg Trp Val Leu Glu Arg Ala Leu Thr Gly Ala 25 Gly Leu Ser Cys Thr Thr Phe Glu Ser Gly Ser Glu Val Leu Asp Ala 40 Leu Thr Thr Lys Thr Pro Asp Val Leu Leu Ser Asp Ile Arg Met Pro 55 Gly Met Asp Gly Leu Ala Leu Leu Lys Gln Ile Lys Gln Arg His Pro 75 Met Leu Pro Val Ile Ile Met Thr Ala His Ser Asp Leu Asp Ala Ala 90 Val Ser Ala Tyr Gln Gln Gly Ala Phe Asp Tyr Leu Pro Lys Pro Phe 100 105 Asp Ile Asp Glu Ala Val Ala Leu Val Glu Arg Ala Ile Ser His Tyr 120 Gln Glu Gln Gln Pro Arg His Ala Pro Asp Phe Gly Pro Thr Thr 135 140 Asp Ile Ile Gly Glu Ala Pro Ala Met Gln Asp Val Phe Arg Ile Ile 150 155 Gly Arg Leu Ser Arg Ser Ser Ile Ser Val Leu Ile Asn Gly Glu Ser 165 170 Gly Thr Gly Lys Glu Leu Val Ala His Ala Leu His Arg His Ser Pro 180 185 Arg Ala Lys Ala Pro Phe Ile Ala Leu Asn Met Ala Ile Pro Lys 200 205 Asp Leu Ile Glu Ser Glu Leu Phe Gly His Glu Lys Gly Ala Phe Thr 215 220 Gly Ala Asn Thr Ile Arg Gln Gly Arg Phe Glu Gln Ala Asp Gly Gly 230 235 Thr Leu Phe Leu Asp Glu Ile Gly Asp Met Pro Leu Asp Val Gln Thr 245 250 Arg Leu Leu Arg Val Leu Ala Asp Gly Gln Phe Tyr Arg Val Gly Gly 260 265 Tyr Ala Pro Val Lys Val Asp Val Arg Ile Ile Ala Ala Thr His Gln 275 280 Asn Leu Glu Leu Arg Val Gln Glu Gly Lys Phe Arg Glu Asp Leu Phe 295 300 His Arg Leu Asn Val Ile Arg Val His Leu Pro Pro Leu Arg Glu Arg 310 315 Arg Glu Asp Ile Pro Arg Leu Ala Arg His Phe Leu Gln Val Ala Ala 325 330 Arg Glu Leu Gly Val Glu Ala Lys Gln Leu His Gln Glu Thr Asp Ala Ala Leu Thr Arg Leu Ala Trp Pro Gly Asn Val Arg Gln Leu Glu Asn 360 Thr Cys Arg Trp Leu Thr Val Met Ala Ala Gly Gln Glu Val Leu Ile 375 Gln Asp Leu Pro Ala Glu Leu Phe Glu Ala Thr Val Pro Glu Ser Thr 395 390 Ala Gly His Ala Leu Pro Asp Ser Trp Ala Thr Leu Leu Ala Gln Trp 405 410 Ala Asp Arg Ala Leu Arg Ser Gly His Gln Asn Leu Leu Ser Glu Ala 425 Gln Pro Glu Met Glu Arg Thr Leu Leu Thr Thr Ala Leu Arg His Thr

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Gln Gly His Lys Gln Glu Ala Ala Arg Leu Leu Gly Trp Gly Arg Asn
                       455
                                           460
Thr Leu Thr Arg Lys Leu Lys Glu Leu Gly Met Glu
                  470
<210> 10007
<211> 101
<212> PRT
<213> Enterobacter cloacae
<400> 10007
Cys Ala Asp Leu Ser Ser Arg Gly Gly Arg His Lys Ala Leu Met
                                    10
Ala Thr Glu Gly Val Asn Ile Glu Phe Thr Asp Asp Gly Ile Lys Arg
            20
                                25
Ile Ala Gln Ala Ala Trp Gln Val Asn Glu Thr Thr Glu Asn Ile Gly
                            40
Ala Arg Arg Leu His Thr Val Leu Glu Arg Leu Met Glu Asp Ile Ser
                        55
Tyr Asp Ala Ser Asp Leu Asn Gly Gln Ser Ile Thr Ile Asp Ala Asp
                    70
                                        75
Tyr Val Gly Lys His Leu Asp Ala Leu Val Ala Asp Glu Asp Leu Ser
                                    90
Arg Phe Ile Leu
            100
<210> 10008
<211> 205
<212> PRT
<213> Enterobacter cloacae
<400> 10008
Arg Pro Gly Ala Met Leu Met Lys Ser Ser Ala His Ser Leu Tyr Leu
                                    10
Cys Leu Ala Met Leu Ser Ala Ser Phe Ser Leu Tyr Ala Thr Glu Thr
            20
                                25
Ala Ser Pro Val Thr Ala Pro Tyr Leu Leu Ala Gly Ala Pro Ser Phe
                            40
Asp Gln Ser Ile Ser Gln Phe Arg Glu Ala Phe Asn Lys Glu Asn Pro
Ser Leu Pro Leu Gly Glu Phe Arg Ala Ile Asp Ser Ala Arg Asp Thr
                                        75
Pro Thr Leu Thr Arg Ala Ala Ser Lys Ile Asn Glu Asn Leu Tyr Ala
Ser Thr Ala Leu Glu Arg Gly Thr Leu Lys Ile Lys Ser Met Gln Ile
                                105
Thr Trp Leu Pro Ile Gln Gly Pro Glu Gln Lys Ala Ala Lys Ala Lys
                            120
                                                125
Ala Leu Glu Tyr Met Ser Ala Ile Leu Arg Ala Phe Thr Pro Thr Phe
                        135
                                            140
Thr Lys Ala Gln Ser Gln Gln Lys Leu Gln Lys Leu Leu Thr Ala Gly
                    150
                                        155
Lys Asn Lys Arg Tyr Tyr Ala Asp Thr Glu Gly Ala Val Arg Tyr Val
               165
                                    170
Val Ala Asp Asn Gly Glu Lys Gly Leu Thr Phe Ala Val Glu Pro Ile
                               185
Lys Leu Ala Leu Ser Asp Ala Leu Glu Gly Ala Asn
                            200
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<210> 10009 <211> 261 <212> PRT <213> Enterobacter cloacae

<400> 10009 Ala Trp Arg Ile Glu Met Arg His Pro Leu Val Met Gly Asn Trp Lys 10 Leu Asn Gly Ser Arg His Met Val Asn Glu Leu Val Ala Asn Leu Arg 25 Lys Glu Leu Ala Gly Val Thr Gly Cys Ala Val Ala Ile Ala Pro Pro Asp Met Tyr Leu Asp Leu Ala Lys Arg Ala Ala Asp Gly Ser His Ile 55 Ile Leu Gly Ala Gln Asn Val Asp Val Asn Leu Ser Gly Ala Phe Thr 70 Gly Glu Thr Ser Ala Glu Met Leu Lys Asp Ile Gly Ala Lys Tyr Ile 85 Ile Ile Gly His Ser Glu Arg Arg Thr Tyr His Lys Glu Ser Asp Glu 100 105 Phe Ile Ala Lys Lys Phe Ala Val Leu Lys Glu Gln Gly Leu Ile Pro 120 125 Val Leu Cys Ile Gly Glu Thr Glu Ala Glu Asn Glu Ala Gly Lys Thr 135 140 Glu Glu Val Cys Ala Arg Gln Ile Asp Ala Val Leu Lys Thr Gln Gly 150 155 Ala Ala Ala Phe Glu Gly Ala Val Ile Ala Tyr Glu Pro Val Trp Ala 170 165 Ile Gly Thr Gly Lys Ser Ala Thr Pro Ala Gln Ala Gln Ala Val His 180 185 Lys Phe Ile Arg Asp His Ile Ala Lys Ala Asp Ala Lys Val Ala Glu 200 Gln Val Ile Ile Gln Tyr Gly Gly Ser Val Asn Ala Ser Asn Ala Ala 215 220 Glu Leu Phe Thr Gln Pro Asp Ile Asp Gly Ala Leu Val Gly Gly Ala 230 235 Ser Leu Lys Ala Asp Ala Phe Ala Val Ile Val Lys Ala Ala Glu Ala 245 250 Ala Lys Gln Ala 260

<210> 10010 <211> 478

<212> PRT

<213> Enterobacter cloacae

<400> 10010

 Arg
 Arg
 Ser
 Leu
 Val
 Gln
 Asn
 Pro
 Ala
 Trp
 Ser
 Trp
 Leu
 Ser
 Asp

 Gly
 Phe
 Arg
 Phe
 Met
 Ile
 Gly
 Ser
 Leu
 Thr
 Ala
 Arg
 Ile
 Phe
 Ala
 Ile

 Phe
 Trp
 Leu
 Thr
 Leu
 Ala
 Leu
 Val
 Leu
 Met
 Leu
 Pro
 Asp
 Ser
 Arg
 Gln
 Met
 Thr
 Glu
 Leu
 Pro
 Asp
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Ile Gly Gln Ala Asp Asn Ala Asp His Pro Gln Lys Lys Lys Tyr Gly
   130
                       135
                                            140
Arg Val Glu Met Val Gly Pro Phe Ser Val Arg Asp Gly Glu Asp Asn
                    150
                                       155
Tyr Gln Leu Tyr Leu Ile Arg Pro Ala Ser Ser Gln Ser Asp Phe
                165
                                    170
Ile Asn Leu Leu Phe Asp Arg Pro Leu Leu Leu Ile Val Thr Met
                                185
Leu Val Ser Ser Pro Leu Leu Trp Leu Ala Trp Ser Leu Ala Lys
                            200
Pro Ala Arg Lys Leu Lys Asn Ala Ala Asp Glu Val Ala Gln Gly Asn
                        215
                                            220
Leu Arg Gln His Pro Glu Leu Glu Ser Gly Pro Gln Glu Phe Leu Ala
                    230
                                        235
Ala Gly Thr Ser Phe Asn Gln Met Val Ser Ala Leu Asp Arg Met Met
                                    250
                245
Thr Ala Gln Gln Arg Leu Leu Ser Asp Ile Ser His Glu Leu Arg Thr
            260
                                265
Pro Leu Thr Arg Leu Gln Leu Gly Thr Ala Leu Leu Arg Arg Arg Ser
                            280
                                                285
Gly Glu Ser Lys Glu Leu Glu Arg Ile Glu Thr Glu Ala His Arg Leu
                        295
                                            300
Asp Ser Met Ile Asn Asp Leu Leu Val Met Ser Arg Asn Gln Gln Lys
                    310
                                        315
Asn Ala Leu Val Ser Glu Thr Val Lys Ala Asn His Leu Trp His Glu
                325
                                    330
Val Leu Asp Asn Ala Ala Phe Glu Ala Glu Gln Met Gly Lys Ser Phe
            340
                                345
Thr Val Asn Phe Pro Pro Gly Pro Trp Pro Leu Tyr Gly Asn Pro Asn
                            360
                                                365
Ala Leu Glu Ser Ala Leu Glu Asn Ile Val Arg Asn Ala Leu Arg Tyr
    370
                        375
                                            380
Ser His Thr Lys Ile Glu Val Ala Phe Ser Val Asp Lys Asp Gly Ile
                    390
                                        395
Thr Val Ile Val Asp Asp Asp Gly Pro Gly Val Ser Pro Glu Asp Arg
                405
                                    410
Glu Gln Ile Phe Arg Pro Phe Tyr Arg Thr Asp Glu Ala Arg Asp Arg
                                425
Glu Ser Gly Gly Thr Gly Leu Gly Leu Ala Ile Val Glu Thr Ala Met
        435
                            440
Gln Gln His Arg Gly Trp Val Lys Ala Asp Asp Ser Pro Leu Gly Gly
                        455
Leu Arg Leu Thr Leu Trp Leu Pro Leu Tyr Lys Arg Ser
                    470
<210> 10011
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<211> 569

<212> PRT

<213> Enterobacter cloacae

## <400> 10011

Ile Phe Asp Ser Lys Pro Arg Lys Ser Cys Arg Phe Phe Lys Lys Gln 10 Ala Glu Arg Ser Gly Asn Ala Val Ser Val Thr Leu Pro Ala Asn Pro 25 Ala Ile Thr Gly Asn Cys Glu Leu Pro His Val His Leu Cys Phe Leu 40 Ala Ser Ala Arg Phe Gly Leu Ser Val Ala Arg Arg Trp Leu Phe Leu 55 Pro Phe Leu Thr Leu Leu Ala Asn Asp Leu Arg Lys Asp Pro Thr Met

Thr Phe Arg His Cys Val Ala Val Asp Leu Gly Ala Ser Ser Gly Arg Val Met Leu Ala Thr Trp Asp Cys Asp Leu His Thr Leu Thr Leu Arg Glu Met His Arg Phe Ala Asn Cys Leu Gln Lys Gln Asp Gly Phe Val Thr Trp Asp Ile Asp Ala Leu Glu Ala Glu Ile Arg Thr Gly Leu His Asn Val Cys Glu Asp Gly Ile Arg Ile Asp Ser Ile Gly Ile Asp Thr Trp Gly Val Asp Tyr Val Leu Leu Asp Arg His Gly Glu Arg Val Gly Leu Pro Val Ser Tyr Arg Asp Ser Arg Thr Asp Gly Leu Met Ala His Ala Ile Ala Gln Leu Gly Lys Glu Asn Ile Tyr Gly Arg Ser Gly Ile Gln Phe Leu Pro Phe Asn Thr Leu Tyr Gln Leu Arg Ala Leu Val Glu Gln Gln Pro Glu Leu Val Glu Lys Val Ala His Ala Leu Leu Ile Pro Asp Tyr Leu Ser Tyr Arg Leu Thr Gly Asn Met Asn Trp Glu Tyr Thr Asn Ala Thr Thr Gln Leu Val Asn Ile Asn Thr Asp Asn Trp Asp Glu His Leu Leu Ala Trp Thr Gly Ala Ser Pro Ser Trp Phe Gly Ala Pro Thr His Pro Gly Asn Val Ile Gly His Trp Leu Cys Pro Gln Gly Asn Lys Ile Pro Val Val Ala Val Ala Ser His Asp Thr Ala Ser Ala Val Ile Ala Ser Pro Leu Ala Gly Lys Asp Ala Ala Tyr Leu Ser Ser Gly Thr Trp Ser Leu Met Gly Phe Glu Ser Lys Thr Pro Tyr Thr Ser Asp Ala Ala Leu Ala Ala Asn Ile Thr Asn Glu Gly Gly Ala Glu Gly Arg Tyr Arg Val Leu Lys Asn Ile Met Gly Leu Trp Leu Leu Gln Arg Val Leu Lys Glu Gln Asn Ile Thr Asp Leu Pro Glu Leu Ile Ala Glu Thr Glu Thr Leu Lys Ala Cys Thr Phe Leu Ile Asn Pro Asn Asp Asp Arg Phe Ile Asn Pro Ala His Met Ser Ala Glu Ile Gln Ala Ala Cys Phe Glu Ala Gly Gln Pro Val Pro Ser Arg Pro Ala Glu Leu Ala Arg Cys Ile Phe Asp Ser Leu Ala Leu Leu Tyr Ala Asp Ile Leu Ser Glu Leu Ala Asp Leu Arg Gly Lys Pro Phe Thr Gln Leu His Ile Val Gly Gly Gly Cys Gln Asn Gln Leu Leu Asn Gln Leu Cys Ala Asp Ala Cys Gly Ile Thr Val Val Ala Gly Pro Ile Glu Ala Ser Thr Leu Gly Asn Ile Gly Ile Gln Leu Met Thr Leu Asp Glu Leu Ser Asn Val Asp Asp Phe Arg Ser Val Val Thr Ala Asn Asn Ser Leu Thr Thr Phe Thr Pro His Pro Cys His Glu Ile Ala Arg Tyr Arg Ala Gln Phe Gln Gln Lys Arg Leu Thr Lys Glu Leu Cys Ala

<210> 10012

<400> 10013

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<211> 361
<212> PRT
<213> Enterobacter cloacae
<400> 10012
Ile Cys Thr Asn Asn Asn Ile Ala Pro Arg Ser Pro Arg Arg Gly Glu
Asn His Leu Gln Ser Leu Gln Leu Thr Gln Val Ser Gly Val Lys Ala
                                25
Met Lys Ile Lys Ala Ser Leu Ile Leu Thr Val Ala Ala Leu Ala Leu
                            40
Ser Gly Ser Ala Leu Ala Glu Val Lys Ile Ala Leu Val Ala Lys Ser
                        55
Leu Gly Asn Gly Phe Phe Glu Ala Ala Asn Val Gly Ala Gln Glu Ala
                    70
                                         75
Ala Lys Glu Leu Gly Asp Val Lys Val Ile Tyr Thr Gly Pro Thr Thr
                                    90
                85
Thr Thr Ala Glu Ala Gln Ile Glu Val Leu Asn Gly Leu Ile Ala Gln
            100
                                105
Gly Val Asp Ala Ile Ala Ile Ser Ala Asn Asp Pro Asp Ala Val Val
                            120
                                                 125
        115
Pro Val Leu Lys Lys Ala Met Gln Arg Gly Ile Lys Val Val Ser Trp
                        135
                                            140
Asp Ser Gly Val Ala Lys Ala Gly Arg Gln Ile His Leu Asn Pro Ser
                    150
                                         155
Asn Asn Ala Leu Ile Gly Glu Thr Asn Val Lys Leu Ala Ala Asp Ala
                165
                                    170
                                                         175
Leu Lys Ala Leu Asn Val Glu Lys Gly Glu Val Ala Val Leu Ser Ala
            180
                                185
Thr Pro Thr Ser Thr Asn Gln Asn Thr Trp Ile Ala Glu Met Lys Lys
                            200
Val Leu Pro Lys Tyr Pro Ser Val Asn Leu Val Thr Val Ala Tyr Gly
                        215
                                             220
Asp Asp Leu Ser Asp Lys Ser Tyr Arg Glu Ala Val Gly Leu Leu Lys
                    230
                                         235
Thr Tyr Pro Glu Leu Lys Val Ile Val Ser Pro Ser Ser Val Gly Ile
                                    250
Val Ala Ala Gln Ala Val Lys Asp Gln Gly Lys Ile Gly Lys Val
                                265
Tyr Val Thr Gly Leu Gly Leu Pro Ser Glu Met Ala Gly Ala Val Lys
                            280
Ser Gly Ala Ser Lys Ser Phe Ala Ile Trp Asn Pro Ile Asp Leu Gly
                        295
Tyr Ala Ala Thr Tyr Leu Ala Asp Asp Leu Val Lys Gly Thr Ala Thr
                    310
                                         315
Lys Gly-Glu Ala Ser Met Gly Lys Leu Gly Lys Val Lys Leu Asp Ala
                                    330
                325
Asp Gly Asn Gly Ala Met Ala Glu Pro Phe Val Tyr Asp Ala Ser Asn
                                345
            340
Ile Asp Lys Phe Ser Lys Ile Phe
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<210> 10013
<211> 507
<212> PRT
<213> Enterobacter cloacae
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Thr Lys Arg Arg Thr Ile Met Thr Pro Leu Gln Leu Ser Gly Ile 10 Thr Lys Val Phe Pro Gly Val Arg Ala Leu Glu Asn Val Gln Leu Ala 20 25 Leu Trp Pro Gly Lys Val Thr Ala Leu Ile Gly Glu Asn Gly Ala Gly 40 Lys Ser Thr Leu Val Lys Val Met Thr Gly Ile Tyr Gln Pro Asp Glu 55 60 Gly Glu Ile Leu Tyr Lys Ala Ile Pro Val His Leu Pro Thr Pro Glu 70 75 Ser Ala His Lys Met Gly Ile Thr Ala Ile His Gln Glu Thr Val Leu 90 Phe Asp Glu Leu Ser Val Thr Glu Asn Ile Phe Val Gly Gln Tyr Leu 105 His Lys Gly Phe Leu Lys Lys Leu Asp Trp Pro Glu Met His Arg Arg 120 Ala Gln Ala Ile Leu Ala Arg Leu Glu Val Gln Ile Asp Pro Arg Ala 135 140 Thr Leu Lys Thr Leu Ser Ile Ala Gln Arg His Met Val Ala Ile Ala 150 155 Arg Ala Leu Ser Phe Glu Ala Gln Val Val Ile Leu Asp Glu Pro Thr 165 170 Ala Ala Leu Ser Gln His Glu Ile Leu Glu Phe Tyr Gln Ile Val Glu 180 185 190 Arg Leu Lys Gln Glu Gly Lys Ala Ile Leu Phe Ile Ser His Lys Phe 200 195 Asp Glu Ile Phe Glu Leu Ala Asp His Tyr Thr Ile Leu Arg Asp Gly 210 215 220 Val Phe Val Gly Ala Gly Ala Ile Asn Glu Ile Thr Glu Glu Arg Met 230 235 Val Ser Met Met Val Gly Arg Ala Ile Thr Gln Thr Phe Pro Lys Ile 245 250 Asp Cys Glu Lys Gly Glu Thr Val Leu Glu Val Gln Asn Leu Cys His 260 265 Pro Thr Glu Phe Ala His Ile Ser Phe Ser Leu Arg Lys Gly Glu Ile 280 285 Leu Gly Phe Tyr Gly Leu Val Gly Ala Gly Arg Thr Glu Leu Met Gln 290 295 300 Ala Leu Ser Gly Val Thr Arg Pro Ser Ser Gly Glu Ile Ile Leu Asn 310 315 Gly Gln Pro Arg Arg Phe Arg Gln Pro Ala Asp Ala Ile Lys Ala Gly 325 330 Ile Val Cys Val Pro Glu Glu Arg Gln Lys Gln Gly Ala Ile Ile Ala 345 Leu Pro Ile Ala Gln Asn Ile Ser Leu Pro Gln Leu Ser Thr Leu Asn 360 Pro Asn Gly Val Leu His Asp Asp Arg Glu Trp Lys Leu Ala Asn Glu 375 Tyr Ala Lys Arg Leu Gln Val Lys Ala Phe Ser Trp Lys Gln Ala Val 390 395 Glu Thr Leu Ser Gly Gly Asn Gln Gln Lys Val Val Ile Gly Lys Trp 405 410 Leu Ala Thr His Pro Asp Val Ile Ile Leu Asp Glu Pro Thr Lys Gly 420 425 430 Ile Asp Ile Gly Ser Lys Ala Ala Val His Gln Phe Met Ser Glu Leu 440 Val Ser Gln Gly Leu Ala Val Ile Met Val Ser Ser Glu Leu Pro Glu 455 460 Val Met Gly Met Ala Asp Arg Ile Ile Val Met His Glu Gly Leu Met 470 475 Val Ala Glu Tyr Gln Ala Gly Asp Ala Thr Ala Glu Thr Ile Val Ser

485 495 Ala Ala Ser Gly Ala Lys Gln Glu Ala Ala 500 <210> 10014 <211> 335 <212> PRT <213> Enterobacter cloacae <400> 10014 Met Leu Ser Ser Leu Leu Lys His Arg Glu Ala Leu Leu Gly Ala Val Ile Ile Leu Met Ile Val Ala Ile Gly Ser Arg Val Pro Ser Phe Ile 25 Ala Pro Gly Asn Leu Val Glu Met Phe Asn Asp Thr Ala Ile Leu Ile 40 Val Leu Ala Leu Gly Gln Met Met Val Leu Leu Thr Lys Gly Ile Asp 55 Leu Ser Met Ala Ala Asn Leu Ala Leu Thr Gly Met Ile Val Ala Leu 70 75 Ile Asn Phe His Tyr Pro Asp Val Pro Val Trp Ala Leu Leu Ile Leu 85 90 Ala Ser Ala Leu Gly Leu Leu Met Gly Ala Ile Asn Gly Leu Leu Val 100 105 Trp Lys Leu Gly Ile Pro Ala Ile Val Val Thr Leu Gly Thr Met Ser 115 120 Ile Tyr Arg Gly Met Ile Phe Leu Leu Ser Gly Gly Gly Trp Val Asn 130 135 140 Ser Asn Gln Met Gly Ala Asp Phe Leu Gly Leu Pro Arg Ala Ser Val 150 155 Leu Gly Leu Pro Val Leu Ser Trp Cys Ala Ile Ala Val Leu Leu 165 170 Val Gly Tyr Phe Leu Arg Tyr Ser Arg Thr Gly Arg Ala Leu Tyr Thr 180 185 Ala Gly Gly Asn Ala Thr Ala Ala Tyr Tyr Thr Gly Ile Asn Ala Gly 195 200 Lys Met Gln Phe Ile Ser Phe Cys Leu Ser Gly Leu Leu Ala Gly Phe 215 220 Cys Gly Tyr Leu Trp Ile Ser Arg Phe Ala Val Ala Tyr Val Asp Val 230 235 Ala Asn Gly Phe Glu Leu Gln Val Val Ala Ala Cys Val Ile Gly Gly 250 Ile Ser Thr Met Gly Gly Thr Gly Arg Val Leu Gly Cys Leu Phe Gly 265 Ala Leu Phe Leu Gly Val Ile Asn Asn Ala Leu Pro Val Ile Gly Val 280 Ser Pro Phe Trp Gln Met Ala Ile Ser Gly Ser Val Ile Val Ile Ala Val Leu Leu Asn Glu Arg Gly Asn Lys Arg Lys Gly Arg Leu Ile Leu 310 315 Arg Asp Ala Ala Leu Ala Arg Gln Lys Leu Ala Val Lys Pro 325 330 335 <210> 10015 <211> 388 <212> PRT <213> Enterobacter cloacae <400> 10015 Leu Arg Arg Ile Ile Met Ser Phe Met Leu Ala Leu Pro Lys Ile Ser

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Leu His Gly Ala Gly Ala Ile Gly Asp Met Val Asn Leu Val Ala Asn
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                                25
Lys Gln Trp Gly Lys Ala Leu Ile Val Thr Asp Gly Gln Leu Val Lys
                            40
Leu Gly Leu Leu Asp Ser Leu Phe Thr Ala Leu Asp Ala His Gln Met
                        55
Ser Tyr His Leu Phe Asp Glu Val Phe Pro Asn Pro Thr Glu Ala Leu
                    70
                                        75
Val Gln Lys Gly Tyr Ala Ala Tyr Gln Asp Ala Glu Cys Asp Tyr Leu
                85
                                    90
Ile Ala Phe Gly Gly Ser Pro Ile Asp Thr Ala Lys Ala Ile Lys
                                105
            100
Ile Leu Thr Ala Asn Pro Gly Pro Ser Thr Asp Tyr Ser Gly Val Gly
                            120
Lys Val Lys Asn Ala Gly Val Pro Leu Val Ala Ile Asn Thr Thr Ala
                        135
                                            140
Gly Thr Ala Ala Glu Met Thr Ser Asn Ala Val Ile Ile Asp Ala Ala
                    150
                                        155
Arg Gln Val Lys Glu Val Ile Ile Asp Pro Asn Ile Ile Pro Asp Ile
                165
                                    170
Ala Val Asp Asp Ala Ser Val Met Leu Asp Ile Pro Ala Ser Val Thr
            180
                                185
Ala Ala Thr Gly Met Asp Ala Leu Thr His Ala Ile Glu Ala Tyr Val
                            200
Ser Val Gly Ala His Pro Leu Thr Asp Ala Asn Ala Leu Glu Ala Ile
                        215
                                            220
Arg Leu Ile Asn Leu Trp Leu Pro Lys Ala Val Asp Asp Gly His Asn
                    230
                                        235
Leu Glu Ala Arg Glu Gln Met Ala Phe Gly Gln Tyr Leu Ala Gly Met
                245
                                    250
Ala Phe Asn Ser Ala Gly Leu Gly Leu Val His Ala Leu Ala His Gln
                                265
Pro Gly Ala Thr His Asn Leu Pro His Gly Val Cys Asn Ala Ile Leu
                            280
Leu Pro Ile Ile Glu Asn Phe Asn Arg Pro Asn Ala Val Ala Arg Phe
                        295
Ala Arg Val Ala Gln Ala Met Gly Val Asp Thr Arg Gly Met Ser Asp
                    310
                                        315
Glu Ala Ala Ser Met Ser Ala Ile Gln Ala Ile Arg Asp Leu Ser Ala
                                    330
Arg Val Gly Ile Pro Ser Gly Phe Ser Gln Leu Gly Val Thr Lys Ala
                                345
Asp Ile Glu Gly Trp Leu Asp Lys Ala Leu Ala Asp Pro Cys Ala Pro
                            360
Cys Asn Pro Arg Thr Ala Ser Arg Asp Glu Val Arg Glu Leu Tyr Leu
    370
Glu Ala Leu
385
<210> 10016
<211> 222
<212> PRT
<213> Enterobacter cloacae
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Asn Gly Met Lys Asn His Leu Ser Cys Leu Lys Gly Asp Thr Ile Lys
                                    10
Ala Ile Val Leu Val Cys Leu Ala Val Gly Val Val Gly Met Ser Tyr
                                25
Gly Ser Leu Ala Met Ala Tyr Gly Phe Pro Leu Trp Val Pro Phe Val
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40

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5524
Leu Ser Leu Thr Val Leu Ala Gly Ala Ser Glu Phe Met Phe Ile Gly
                        55
                                            60
Ile Val Ala Ser Gly Gly Asn Pro Leu Ala Ala Ala Ala Gly Leu
                    70
                                        75
Leu Val Asn Ala Arq His Val Pro Phe Gly Val Thr Val Arg Asp Leu
                85
                                    90
Val Gly Lys Arg Gly Leu Ser Phe Leu Gly Cys His Ile Met Asn Asp
                                105
Glu Ser Val Val Phe Gly Leu Ser Gln Lys Thr Ala Glu Gln Arg Lys
                            120
Ala Ala Tyr Trp Leu Cys Gly Leu Gly Val Ala Ile Ile Trp Pro Leu
                        135
                                            140
Gly Ala Val Leu Gly Ala Met Val Gly Lys Leu Leu Pro Asp Pro Glu
                    150
                                        155
Thr Ile Gly Leu Asp Ala Val Phe Pro Ala Ile Leu Leu Ala Leu Val
                165
                                    170
Val Pro Ala Phe Lys Asn Arg Thr Thr Leu Ile Arg Ala Cys Ser Gly
            180
                                185
                                                    190
Ala Val Leu Ser Leu Ala Ala Val Pro Phe Ala Pro Val Gly Leu Pro
                            200
                                                205
Val Leu Leu Ser Leu Leu Gly Leu Ala Ala Arg Lys Lys
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                        215
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<212> PRT
<213> Enterobacter cloacae
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Arg Glu Arg Arg Gly Ala Gln Met Arg Lys Arg Asp Thr Ile Val Arg
                                    10
Tyr Thr Ala Pro Glu Arg Ile Asn His Trp Val Thr Ala Phe Cys Phe
Met Leu Ala Ala Ile Ser Gly Leu Gly Phe Phe Pro Ser Phe Asn
Trp Leu Met Gln Ile Met Gly Thr Pro Gln Leu Ala Arg Ile Leu His
                        55
Pro Phe Val Gly Val Ile Met Phe Ala Ser Phe Ile Ile Met Phe Phe
Arg Tyr Trp His His Asn Leu Ile Asn Arg Asp Asp Ile Phe Trp Ala
                                    90
Lys Asn Ile Arg Lys Ile Val Val Asn Glu Glu Val Gly Asp Thr Gly
            100
                                105
Arg Tyr Asn Phe Gly Gln Lys Cys Val Phe Trp Ala Ala Ile Ile Phe
        115
                            120
                                                125
Leu Val Leu Leu Val Ser Gly Val Ile Ile Trp Arg Pro Tyr Phe
                        135
                                            140
Ala Pro Ala Phe Ser Ile Pro Val Ile Arg Phe Ala Leu Met Leu His
                    150
                                        155
Ser Phe Ala Ala Val Ala Leu Ile Val Val Ile Met Val His Ile Tyr
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170

190

Ala Ala Leu Trp Val Lys Gly Thr Ile Thr Ala Met Val Glu Gly Trp 185

Val Thr Lys Thr Trp Ala Lys Lys His His Pro Arg Trp Tyr Arg Glu 200

215

180

165

Val Arg Gln Lys Gln Glu Lys Ser Ser Glu

<sup>&</sup>lt;210> 10018

<sup>&</sup>lt;211> 429

<sup>&</sup>lt;212> PRT

# <213> Enterobacter cloacae

<400> 10018 Asp Arg Arg Asn Asp Gly Ser Pro Leu Arg Lys Asp Pro Asn Met 10 Lys Trp Phe Asn Thr Leu Ser His Asn Arg Trp Leu Glu Gln Glu Thr 25 Asp Arg Ile Leu Asp Phe Gly Lys Asn Ala Ala Val Pro Thr Gly Phe Gly Trp Leu Gly Asn Asn Gly Gln Val Arg Ser Asp Met Gly Thr His Leu Trp Ile Thr Ala Arg Met Leu His Val Tyr Ala Val Ala Ala Asn 70 75 Met Gly Arg Pro Gly Ala Tyr Ala Leu Val Glu His Gly Ile Asn Ala 85 90 Leu Asn Gly Pro Leu Arg Asp Lys Gln His Gly Gly Trp Tyr Ala Cys 100 1.05 . 110 Val Asn Asp Glu Gly Val Ile Asp Ala Ser Lys Gln Gly Tyr Gln His 115 120 125 Phe Phe Val Leu Gly Ala Ala Ser Ala Val Thr Thr Gly His Pro 135 140 Gln Ala Arg Lys Leu Leu Asp Asp Ala Ile Glu Val Ile Glu Arg Tyr 150 155 Phe Trp Ser Glu Gln Glu Gln Met Cys Leu Glu Ser Trp Asp Glu Ala 170 165 Phe Ser Lys Thr Glu Asp Tyr Arg Gly Gly Asn Ala Asn Met His Ala 185 180 Val Glu Ala Phe Leu Ile Val Tyr Asp Val Thr His Asp Arg Lys Trp 200 205 Leu Asp Arg Ala Leu Arg Ile Ala Ser Val Ile Ile His Asp Val Ala 215 220 Arg Lys Gly Glu Tyr Arg Val Asn Glu His Phe Asp Thr Asn Trp Asn 230 235 Pro Ile Arg Asp Tyr Asn Ile Asp Asn Pro Ala His Arg Phe Arg Ala 250 245 Tyr Gly Gly Thr Pro Gly His Trp Ile Glu Trp Gly Arg Leu Met Leu 265 His Leu Arg Ala Ala Leu Glu Ala Arg Phe Glu Thr Pro Pro Glu Trp 275 280 Leu Leu Glu Asp Ala Lys Gly Leu Phe His Ala Thr Ile Arg Asp Ala 295 300 Trp Ala Pro Asp Gly Ala Asp Gly Phe Val Tyr Ser Val Gly Trp Asp 310 315 Gly Lys Pro Ile Val Arg Glu Arg Val Arg Trp Pro Ile Val Glu Ala 330 Met Gly Thr Ala Tyr Ala Leu Tyr Thr Val Thr Gly Glu Ala Gln Tyr 345 Glu Ala Trp Tyr Gln Lys Trp Trp Asp Tyr Cys Ile Lys Tyr Leu Met 360 Asp Tyr Glu Asn Gly Ser Trp Trp Gln Glu Leu Asp Thr Asn Asn Glu 375 Val Thr Thr Lys Val Trp Asp Gly Lys Gln Asp Ile Tyr His Leu Leu 390 395 His Cys Leu Val Ile Pro Arg Leu Pro Leu Ala Pro Gly Leu Ala Pro 405 410 Ala Val Ala Ala Gly Leu Leu Asp Ser Gln Ala Lys

<sup>&</sup>lt;210> 10019

<sup>&</sup>lt;211> 350

<sup>&</sup>lt;212> PRT

## <213> Enterobacter cloacae

<400> 10019 Met Ala Thr Gly Thr Leu Pro Asp Ala Gly Gln Ile Leu Asn Ser Leu 10 Ile Asn Ser Ile Leu Leu Val Asp Asp Glu Leu Ala Val His Tyr Ala 20 25 Asn Pro Ala Ala Gln Gln Leu Leu Ala Gln Ser Ala Arg Lys Leu Phe 40 Gly Thr Pro Leu Pro Glu Leu Leu Ser Tyr Phe Ser Leu Asn Ile Gly Leu Met Gln Glu Ser Leu Gln Ala Gly Gln Gly Phe Thr Asp Asn Glu 75 Val Thr Leu Val Ile Asp Gly Arg Ser His Ile Leu Ser Leu Thr Ala 90 Gln Arg Leu Pro Asp Gly Met Ile Leu Leu Glu Met Ala Pro Met Asp 105 Asn Gln Arg Arg Leu Ser Gln Glu Gln Leu Gln His Ala Gln Gln Ile 115 120 Ala Ala Arg Asp Leu Val Arg Gly Leu Ala His Glu Ile Lys Asn Pro 135 140 Leu Gly Gly Leu Arg Gly Ala Ala Gln Leu Leu Thr Lys Ala Leu Pro 150 155 Asp Pro Ala Leu Ala Glu Tyr Thr Asn Val Ile Ile Glu Gln Ala Asp 165 170 Arg Leu Arg Asn Leu Val Asp Arg Leu Leu Gly Pro Gln Gln Pro Gly 180 185 190 Met His Val Ser Glu Ser Ile His Lys Val Ala Glu Arg Val Val Lys 200 195 205 Leu Val Ser Met Glu Leu Pro Asp Asn Val Thr Leu Val Arg Asp Tyr 215 220 Asp Pro Ser Leu Pro Glu Leu Ala His Asp Pro Asp Gln Ile Glu Gln 230 235 Val Leu Leu Asn Ile Val Arg Asn Ala Leu Gln Ala Leu Gly Pro Glu 250 245 Gly Gly Glu Ile Ile Leu Arg Thr Arg Thr Ala Phe Gln Leu Thr Leu 265 His Gly Val Arg Tyr Arg Leu Ala Ala Arg Ile Asp Val Glu Asp Asn 280 Gly Pro Gly Ile Pro Pro His Leu Gln Asp Thr Leu Phe Tyr Pro Met 295 300 Val Ser Gly Arg Glu Gly Gly Thr Gly Leu Gly Leu Ser Ile Ala Arg 310 315 Asn Leu Ile Asp Gln His Ser Gly Lys Ile Glu Phe Thr Ser Trp Pro 330 Gly His Thr Glu Phe Ser Val Phe Leu Pro Ile Lys Lys

<210> 10020

<211> 495

<212> PRT

<213> Enterobacter cloacae

<400> 10020

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Gly Pro Gln Arg Asp Gln Asn Gly Pro Pro Tyr Thr Asn Ala Thr Pro 20 25 30 
Thr Glu Gly Val Ser Met Ser Val Pro Ser Ile Asp Trp Asp Leu Ala 35 40 45 
Leu Ile Gln Lys Tyr Asn Tyr Ser Gly Pro Arg Tyr Thr Ser Tyr Pro

55 60 Thr Ala Leu Glu Phe Ser Asp Ala Phe Gly Glu Ala Asp Phe Gln His 70 75 Ala Val Ala Arg Tyr Pro Glu Arg Pro Leu Ser Leu Tyr Val His Ile 85 90 Pro Phe Cys His Lys Leu Cys Tyr Phe Cys Gly Cys Asn Lys Ile Val 105 Thr Arg Gln Gln His Lys Ala Asp Gln Tyr Leu Asp Ala Leu Glu Gln 120 Glu Ile Leu His Arg Ala Pro Leu Phe Lys Gly Arg His Val Ser Gln 135 Leu His Trp Gly Gly Gly Thr Pro Thr Tyr Leu Asn Lys Ala Gln Ile 150 155 Ser Arg Leu Met Ala Leu Leu Arg Asp Asn Phe Ser Phe Asn Asp Asp 165 170 Ala Glu Ile Ser Ile Glu Val Asp Pro Arg Glu Ile Glu Leu Asp Val 180 185 Leu Asp His Leu Arg Ala Glu Gly Phe Asn Arg Leu Ser Met Gly Val 200 Gln Asp Phe Asn Lys Glu Val Gln Arg Leu Val Asn Arg Glu Gln Asp 215 220 Glu Ala Phe Ile Phe Ala Leu Leu Asn His Ala Arg Glu Ile Gly Phe 230 235 Thr Ser Thr Asn Ile Asp Leu Ile Tyr Gly Leu Pro Lys Gln Thr Pro 245 250 Glu Ser Phe Ala Tyr Thr Leu Lys Arg Val Ala Glu Leu Asn Pro Asp 265 260 Arg Leu Ser Val Phe Asn Tyr Ala His Leu Pro Thr Leu Phe Ala Ala 280 Gln Arg Lys Ile Lys Asp Ala Asp Leu Pro Ser Ala Gln Gln Lys Leu 295 300 Asp Ile Leu Gln Glu Thr Ile Ala Ser Leu Thr Glu Thr Gly Tyr Gln 310 315 Phe Ile Gly Met Asp His Phe Ala Arg Pro Asp Asp Glu Leu Ala Ile 325 330 Ala Gln Arg Glu Gly Val Leu His Arg Asn Phe Gln Gly Tyr Thr Thr 340 345 Gln Gly Asp Thr Asp Leu Leu Gly Met Gly Val Ser Ala Ile Ser Met 360 Ile Gly Asp Cys Tyr Ala Gln Asn Gln Lys Glu Leu Lys Leu Tyr Tyr 375 Gln Gln Val Asp Glu Thr Gly Asn Ala Leu Trp Arg Gly Ile Ala Leu 390 395 Thr Arg Asp Asp Cys Ile Arg Arg Asp Val Ile Lys Ala Leu Ile Cys 410 Asn Phe Arg Leu Glu Phe Arg Glu Val Glu Ser Gln Trp Asp Leu Gln 420 425 Phe Ser Asp Tyr Phe Ala Glu Asp Leu Lys Leu Ala Pro Leu Ala 440 Lys Asp Gly Leu Val Asp Val Ser Glu Ser Ala Val Val Thr Pro 455 460 Lys Gly Arg Leu Leu Ile Arg Asn Ile Cys Met Cys Phe Asp Ala Tyr 470 475 Leu Arg Gln Lys Ala Arg Leu Gln Gln Phe Ser Arg Val Ile 495 490

<sup>&</sup>lt;210> 10021

<sup>&</sup>lt;211> 323

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<400> 10021 Arg Phe Arg Gly Lys Lys Arg Val Arg Ser Gly Cys Trp Trp Arg Lys 10 Lys Pro Ile Arg Arg Trp Ala Lys Val Ser Thr Ala Thr Thr Pro Asp 25 Ala Tyr Ala Pro Gly Lys Thr Asn Gln Leu Asn Ala Val Val Gln Phe Glu Leu Asn Arg Val Arg Arg His Ala Asn Ala Val Val Phe Phe Ser 55 Thr Gln Arg Asp Val Ser Val Asp Ser Phe Ile Gly Glu His Ala Ala 70 75 Ser Gly Gln Glu Leu Ala Val Cys Val Gln Arg Leu Gln Gly Phe Phe 85 90 Gln Arg Ala Gly Asn Leu Trp Asp Leu Phe Arg Phe Phe Trp Arg Gln 100 105 110 Val Val Gln Val Phe Val His Gly Phe Ala Arg Val Asp Leu Val Leu 115 120 125 Asp Thr Val Gln Thr Gly His Gln Gln Cys Cys Glu Ala Gln Val Trp 135 140 Val Ser Arg Arg Val Arg Glu Ala His Phe Asp Thr Thr Arg Phe Arg 150 155 Arg Arg Asn His Arg Asp Thr Asp Arg Ser Arg Thr Val Thr Gly Arg 170 175 Val Arg Gln His His Gly Cys Phe Val Ala Trp Asn Gln Thr Leu Val 185 Gly Val Arg Gly Arg Val Arg Gln Gly Val Asp Arg Phe Ser Val Phe 200 195 Asp Asn Thr Ala Asp Val Val Gln Arg Leu Leu Arg Gln Thr Arg Ile 215 220 Leu Val Thr Arg Glu Gln Val Gly Ala Val Leu Gly Gln Gly His Val 230 235 Ala Val His Ala Gly Thr Val Val Ala Lys His Trp Phe Trp His Glu 245 250 Gly Arg Gly Phe Thr Glu Thr Val Arg Asn Val Val Tyr Asn Val Phe 265 Val Asp Leu Asn Leu Ile Arg Phe Phe Gly His Gly Val Glu Ala Gly 280 Ser Asp Leu Val Leu Ala Ser Arg Cys His Phe Val Val Val Arg Phe 295 Asn Asn Gln Ala His Leu Phe His Asp Gln Thr His Gly Arg Thr Asp 315 Val Leu

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<210> 10022
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# <400> 10022

 Arg
 Ile
 Asp
 Arg
 Asn
 Arg
 Glu
 Val
 Thr
 Ala
 Phe
 His
 Ala
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 11
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 Val
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<sup>&</sup>lt;211> 190

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

85 90 Asn Ile Ala Ala Asp Asp Gln Arg Arg Phe Phe Val Glu Arg Val Asn 100 105 110 Glu Arg Ser Gly Cys Ile Trp His Gln Asn His Val Gly Phe Val Asn 120 125 Ala Phe Pro Ala Ala Asn Gly Gly Ala Val Lys His Phe Ala Phe Phe 135 140 Lys Glu Phe Gly Val His Leu Met Ser Arg Asp Arg Asp Val Leu Phe 150 155 Phe Thr Phe Ser Ile Gly Glu Ala Gln Ile Asn Lys Leu His Phe Met 165 170 Phe Val Gln His Arg Gln Asn Val Phe Ser Gly His Thr <210> 10023 <211> 218 <212> PRT <213> Enterobacter cloacae <400> 10023 Leu Lys Phe Leu Phe Pro Ala Thr Val Thr Ser Pro Arg Arg Lys Glu 10 Ile Asn Met Leu Tyr Ile Phe Asp Leu Gly Asn Val Ile Val Asp Ile 20 25 Asp Phe Asn Arg Val Leu Gly Ala Trp Ser Asp Phe Ser Arg Val Pro 40 Leu Ala Thr Leu Lys Gln Asn Phe Ala Met Gly Glu Thr Phe His Leu 55 His Glu Arg Gly Glu Ile Ser Asp Glu Ala Phe Ala Glu Arg Phe Cys 70 75 Gln Glu Met Gly Leu Ser Leu Ser Tyr Glu Gln Phe Ser His Gly Trp 85 90 Gln Ala Ile Phe Val Ala Ile Arg Pro Glu Val Ile Asp Ile Met 'His 110 100 105 Lys Leu Arg Glu Gln Glu His Arg Val Val Leu Ser Asn Thr Asn 115 120 125 Arg Leu His Thr Thr Phe Trp Pro Asp Glu Tyr Pro Glu Ile His Ala 135 140 Ala Ala Asp Lys Val Tyr Leu Ser Gln Glu Met Gly Met Arg Lys Pro 150 155 Glu Ala Arg Ile Tyr Gln Ala Val Leu Gln Glu Glu Gly Phe Thr Ala 165 170 Ala Asp Ala Val Phe Phe Asp Asp Asn Ala Asp Asn Ile Glu Gly Ala 185 190 Asn Gln Leu Gly Ile Thr Ser Ile Leu Val Thr Gly Lys Glu Thr Ile 200 205 Pro Asn Tyr Phe Ala Lys Gln Leu Cys 210 215 <210> 10024 <211> 364 <212> PRT <213> Enterobacter cloacae <400> 10024 Ala Leu Ser Pro Thr Gly His Glu Tyr Thr Asn Arg Thr Ile Arg Cys 10 Gly Tyr Ala Gly Phe Ala Gly Glu Arg Trp Pro Arg His Ile Leu Ala 25 Pro Gly Met Ser Gln Leu Ala Val Trp Pro Arg Val Thr Arg Glu Ser

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Thr Ala Met Tyr His Leu Arg Val Pro Gln Thr Glu Glu Glu Leu Asp
                        55
                                             60
Ala Tyr Tyr His Phe Arg Trp Glu Met Leu Arg Lys Pro Leu His Gln
                    70
                                        75
Pro Lys Gly Ser Glu Arg Asp Ala Trp Asp Ala Met Ala His His Gln
                85
                                    90
Met Val Val Asp Glu Glu Gly Asn Leu Val Ala Val Gly Arg Leu Tyr
            100
                                105
Ile Asn Ala Asp Asn Glu Ala Ser Ile Arg Phe Met Ala Val His Pro
                            120
Ser Val Gln Asp Lys Gly Leu Gly Thr Leu Met Ala Met Thr Leu Glu
                        135
Ser Val Ala Arg Gln Glu Gly Val Lys Arg Val Thr Cys Ser Ala Arg
                    150
                                        155
Glu Asp Ala Val Glu Phe Phe Ala Lys Leu Gly Phe Val Asn Gln Gly
                                    170
                165
Glu Ile Thr Ala Pro Gln Thr Thr Pro Ile Arg His Phe Leu Met Ile
            180
                                185
Lys Pro Ile Ala Thr Leu Asp Asp Ile Leu His Arg Ala Asp Trp Cys
                            200
Gly Gln Leu Gln Gln Ala Trp Tyr Gln His Ile Pro Leu Ser Glu Lys
                        215
                                            220
Met Gly Val Arg Ile Gln Gln Tyr Thr Gly Gln Lys Phe Ile Thr Thr
                    230
                                        235
Met Pro Glu Thr Gly Asn Gln Asn Pro His His Thr Leu Phe Ala Gly
                                    250
                245
Ser Leu Phe Ser Leu Ala Thr Leu Thr Gly Trp Gly Leu Ile Trp Leu
            260
                                265
                                                     270
Met Leu Arg Glu Arg His Leu Gly Gly Thr Ile Ile Leu Ala Asp Ala
        275
                            280
His Ile Arg Tyr Ser Ala Pro Ile Ser Gly Lys Pro Ser Ala Val Ala
                        295
                                            300
Asp Leu Gly Ala Leu Gly Gly Asp Leu Asp Arg Leu Ala Arg Gly Arg
                    310
                                        315
Lys Ala Arg Val Gln Met Gln Val Glu Leu Phe Gly Asp Glu Thr Pro
                                    330
                325
Gly Ala Val Phe Glu Gly Thr Tyr Ile Val Leu Pro Ala Lys Pro Tyr
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                                345
Gly Ala Tyr Glu Glu Gly Gly Asn Glu Glu Glu
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                            360
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<210> 10025

<211> 467

<212> PRT

<213> Enterobacter cloacae

## <400> 10025

 Met
 Ala
 Asp
 Ala
 Gly
 Gly
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 Asp
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Ser Asp Lys Leu Gly Leu Lys Lys His Leu Leu Trp Ile Ile Ser Val
        115
                            120
                                                125
Leu Leu Phe Leu Phe Ala Pro Phe Phe Leu Tyr Val Phe Ala Pro Leu
                        135
                                            140
Leu Lys Thr Asn Ile Trp Leu Gly Ala Leu Ser Gly Gly Leu Tyr Ile
                   150
                                        155
Gly Phe Val Phe Ser Ala Gly Ser Gly Ala Ile Glu Ala Tyr Ile Glu
                165
                                    170
Arg Val Ser Arg Asn Ser Phe Phe Glu Tyr Gly Lys Ala Arg Met Phe
            180
                                185
Gly Cys Leu Gly Trp Gly Leu Cys Ala Ser Thr Gly Gly Ile Leu Phe
                            200
Gly Ile Asp Pro Ser Tyr Val Phe Trp Met Gly Ser Ala Ala Ala Leu
                        215
                                            220
Leu Leu Met Leu Leu Val Val Ala Lys Pro Lys Pro Asn Gln Thr
                    230
                                        235
Ala Gln Val Met Asn Ala Leu Gly Ala Asn Gln Arg Gln Ile Thr Ala
                245
                                    250
Lys Thr Val Phe Asn Leu Phe Arg Gln Arg Arg Met Trp Met Phe Ile
                                265
Leu Tyr Val Ile Gly Val Ala Cys Val Tyr Asp Val Phe Asp Gln Gln
                            280
        275
                                                285
Phe Ala Thr Phe Phe Lys Thr Phe Phe Ala Thr Pro Gln Glu Gly Thr
                        295
                                            300
Arg Ala Phe Gly Phe Ala Thr Thr Ala Gly Glu Ile Cys Asn Ala Ile
                                        315
                    310
Ile Met Phe Cys Ser Pro Trp Ile Ile Asn Arg Ile Gly Ala Lys Asn
                325
                                    330
Thr Leu Leu Ile Ala Gly Val Ile Met Ala Thr Arg Ile Ile Gly Ser
            340
                                345
                                                     350
Ser Phe Ala Thr Thr Ala Val Glu Val Ile Ala Leu Lys Met Leu His
                            360
Ala Leu Glu Val Pro Phe Leu Leu Val Gly Ala Phe Lys Tyr Ile Thr
    370
                        375
                                            380
Gly Val Phe Asp Thr Arg Leu Ser Ala Thr Ile Tyr Leu Ile Gly Phe
                    390
                                        395
Gln Phe Ala Lys Gln Ser Ala Ala Ile Phe Leu Ser Ala Phe Ala Gly
                405
                                    410
Asn Met Tyr Asp Arg Val Gly Phe Gln Glu Thr Tyr Leu Ile Leu Gly
            420
                                425
Cys Phe Val Leu Ala Ile Thr Val Val Ser Ala Phe Thr Leu Ser Gly
                            440
Arg Arg Glu Ile Ala Ala Thr Ala Gly Ala Ala Leu Thr His Gln
   450
                        455
Ser Arg
465
<210> 10026
<211> 293
<212> PRT
<213> Enterobacter cloacae
<400> 10026
Cys Pro Val Ile Arg Arg Gly Cys Gly Val Ala Ala Gln Leu Ile
                                    10
Leu Arg Lys Asp Asp Phe Phe Ala Ser Ala Ser Gln Ala Val Ala Val
                                25
Ala Asp Arg Tyr Pro Gln Asn Val Phe Ala Glu His Thr His Glu Phe
                            40
                                                4.5
Cys Glu Leu Val Leu Val Trp Arg Gly Asn Gly Leu His Val Leu Asn
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55

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Asp Arg Pro Tyr Arg Ile Thr Arg Gly Asp Leu Phe Tyr Ile Arg Ala
                    70
                                        75
Glu Asp Lys His Ser Tyr Ala Ser Val Asn Asp Leu Val Leu Gln Asn
                85
                                    90
Val Ile Tyr Cys Pro Asp Arg Leu Lys Leu Asn Val Asp Trp Ala Gly
            100
                                105
Asn Ile Pro Gly Phe His Asn Ala Arg Gly Glu Pro His Trp Arg Leu
                            120
Ser Ser Asn Gly Met Ala Gln Val Arg Gln Thr Ile Ser Gln Leu Glu
                        135
Gln Glu Ser Gln Lys Ser Asp Pro Ala Ala Asn Gln Met Ser Glu Leu
                    150
                                        155
Leu Phe Ala Gln Leu Val Met Thr Leu Lys Arg His Arg Tyr Ala Thr
                165
                                    170
Asp Asn Pro Ser Ala Thr Met Gln Glu Ala Leu Leu Asp Lys Leu Ile
                                185
            180
Thr Arg Leu Ala Gly Ser Leu Asn Lys Ser Phe Val Leu Asp Lys Phe
        195
                            200
Cys Glu Gln Glu Gln Cys Ser Glu Arg Ala Leu Arg Gln Gln Phe Arg
                        215
                                             220
Thr Gln Thr Gly Met Thr Val Asn His Tyr Leu Arg Gln Leu Arg Ile
                    230
                                        235
Cys His Ala Gln Tyr Leu Leu Gln His Thr Glu Leu Met Val Ser Glu
                                    250
                245
Val Ala Met Arg Cys Gly Phe Glu Asp Ser Asn Tyr Phe Ser Val Val
                                                     270
            260
                                265
Phe Asn Arg Glu Val Gly Met Thr Pro Val Gln Trp Arg His Arg Ser
        275
                            280
                                                 285
Arg Lys Ala Ala
    290
<210> 10027
<211> 218
<212> PRT
<213> Enterobacter cloacae
<400> 10027
Gln Leu Cys Arg Pro Thr Ile Met Glu Arg Ile Met Ser Tyr Thr Leu
                                    10
Pro Ser Leu Pro Tyr Ala Tyr Asp Ala Leu Glu Pro His Phe Asp Lys
Gln Thr Met Glu Ile His His Thr Lys His His Gln Thr Tyr Val Asn
Asn Ala Asn Ala Ala Leu Glu Ser Leu Pro Glu Phe Ala Asn Leu Pro
Val Glu Glu Leu Ile Thr Lys Leu Asp Gln Leu Pro Ala Asp Lys Lys
                                        75
Thr Val Leu Arg Asn Asn Ala Gly Gly His Ala Asn His Ser Leu Phe
                                    90
                85
Trp Lys Gly Leu Lys Thr Gly Thr Thr Leu Gln Gly Asp Leu Lys Ala
                                105
            100
                                                     110
Ala Ile Glu Arg Asp Phe Gly Ser Val Asp Asn Phe Lys Ala Glu Phe
                            120
                                                 125
Glu Lys Ala Ala Ala Thr Arg Phe Gly Ser Gly Trp Ala Trp Leu Val
                        135
                                             140
Leu Lys Gly Asp Lys Leu Ala Val Val Ser Thr Ala Asn Gln Asp Ser
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150

165

Pro Leu Met Gly Glu Ala Ile Ser Gly Ala Ser Gly Phe Pro Ile Leu

Gly Leu Asp Val Trp Glu His Ala Tyr Tyr Leu Lys Phe Gln Asn Arg 180 185 190

155

170

Arg Pro Asp Tyr Ile Lys Ala Phe Trp Asp Val Val Asn Trp Asp Glu 200 Ala Ala Ala Arg Phe Ala Ala Lys Lys 210 <210> 10028 <211> 235 <212> PRT <213> Enterobacter cloacae <400> 10028 Leu Ala Phe Phe Val Ser Glu Gly Val Glu Met His Tyr Pro Val Asn Val Phe Thr Gly Lys Val Arg Glu Tyr Glu Gly Ser Arg Pro Ser Ala 20 25 Ile Ala Lys Val Gln Val Asp Gly Glu Leu Thr Leu Thr Asp Leu Gly 35 Leu Ala Gly Asp Gln Gln Ala Glu Lys Lys Ile His Gly Gly Pro Asp Arg Ala Leu Cys His Tyr Pro Arg Glu His Tyr Gln His Trp Lys Thr 70 75 Glu Phe Pro Glu Gln Ala Asp Leu Phe Val Ala Pro Ala Phe Gly Glu 90 Asn Leu Ser Thr Glu Gly Leu Thr Glu Lys Asn Val Phe Ile Gly Asp 105 110 Ile Tyr Arg Trp Gly Asp Ala Leu Ile Gln Val Thr Gln Pro Arg Ser 120 Pro Cys Phe Lys Leu Asn Tyr His Phe Gly Ile Gln. Asp Met Ser Ala 135 Gln Leu Gln Asn Ala Gly Lys Thr Gly Trp Leu Tyr Arg Val Val Gln 155 150 Ala Gly Gln Val Ser Ala Asp Ala Pro Leu Glu Leu Ala Ser Arg Leu 170 Ser Glu Val Ser Val Tyr Glu Ala Cys Ala Ile Ala Trp His Met Pro 185 Phe Asp Asp Gln Tyr His Arg Leu Leu Ser Ala Ala Gly Leu Ser 200 Thr Ser Trp Thr Arg Thr Met Gln Lys Arg Arg Ile Ser Gly Lys Ile 215 Glu Ser Ser Ser Arg Arg Leu Trp Gly Lys 230 <210> 10029 <211> 201 <212> PRT <213> Enterobacter cloacae <400> 10029 Leu Tyr Val Val Leu His Pro Leu Thr His Val Cys Ser Leu Asn Arg 10 Arg Leu Ser Leu Val Glu Ser Arg His Glu Arg Phe Trp Glu Gln Val 20 25 Met Arg Lys Val Thr Ala Ala Val Met Ala Ser Thr Leu Ala Phe Ser 40 Ala Phe Ser Gln Ala Ala Val Ala Ile Ile Ser Asp Asn Gly Ser Ser 60 55 Ala Glu Gly Ala Thr Gln His Ser Ser Gln Ser His Met Phe Asp Gly 70 75 Ile Ser Leu Thr Glu His Gln Arg Gln Gln Met Arg Asp Leu Met Gln

90

Arg Ala Arg His Asp Gln Pro Pro Val Asn Val Ser Glu Met Glu Thr

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100
                                105
Met His Arg Leu Val Thr Ala Glu Asn Phe Asp Glu Ser Ala Val Arg
       115
                            120
                                                125
Ala Gln Ala Glu Asn Leu Ala Gln Glu Gln Val Ala Arg Gln Val Lys
                       135
                                            140
Met Ala Lys Val Arg Asn Gln Met Phe His Leu Leu Thr Pro Glu Gln
                    150
                                        155
Gln Ala Val Leu Asn Thr Lys His Gln Gln Arg Met Asn Gln Leu Arg
                                    170
Glu Val Ala Arg Met Gln Arg Ser Ser Asp Met Thr Leu Phe Ser Ser
                                185
Asn Ser Ser Thr Arg Ser Asn Gln
<210> 10030
<211> 303
<212> PRT
<213> Enterobacter cloacae
<4.00> 10030
Arg His Gly Met Thr Gly Val Phe Met Asn Gln Ser Tyr Gly Arg Leu
Val Ser Arg Ala Ala Ile Ala Ala Thr Val Met Ala Ser Cys Leu Leu
            20
                                25
Ile Ile Lys Ile Phe Ala Trp Trp Tyr Thr Gly Ser Val Ser Ile Leu
        35
                            40
Ala Ala Leu Val Asp Ser Leu Val Asp Ile Ala Ala Ser Leu Thr Asn
                        55
Leu Leu Val Val Arg Tyr Ser Leu Gln Pro Ala Asp Glu Glu His Thr
                    70
Phe Gly His Gly Lys Ala Glu Ser Leu Ala Ala Leu Ala Gln Ser Met
                85
                                    90
Phe Ile Ser Gly Ser Ala Leu Phe Leu Phe Leu Thr Gly Ile Gln His
            100
                                105
                                                    110
Leu Val Ser Pro Ser Pro Met Asn Asp Pro Gly Val Gly Val Val Val
        115
                            120
                                                125
Thr Val Val Ala Leu Ile Ser Thr Leu Val Leu Val Thr Phe Gln Arg
                        135
                                            140
Trp Val Val Arg Lys Thr Gln Ser Gln Ala Val Arg Ala Asp Met Leu
                    150
                                        155
His Tyr Gln Ser Asp Val Met Met Asn Gly Ala Ile Leu Ile Ala Leu
                                    170
Gly Leu Ala Trp Tyr Gly Trp His Arg Ala Asp Ala Leu Phe Ala Leu
            180
                                185
Gly Ile Gly Ile Tyr Ile Leu Tyr Ser Ala Leu Arg Met Gly Tyr Asp
                            200
Ala Val Gln Ser Leu Leu Asp Arg Ala Leu Pro Asp Ala Glu Arg Asp
                        215
Glu Ile Tyr Ala Ile Val Thr Asn Trp Pro Gly Val Ser Gly Ala His
                    230
                                        235
Asp Leu Arg Thr Arg Gln Ser Gly Pro Thr Arg Phe Ile Gln Ile His
                245
                                    250
Leu Glu Met Glu Asp Asn Leu Pro Leu Val Gln Ala His Met Val Ala
                                265
Glu Gln Val Glu Gln Ala Ile Leu Gln Arg Phe Pro Gly Ser Asp'Val
                            280
Ile Ile His Gln Asp Pro Cys Ser Val Val Pro Arg Ala Phe
                        295
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<210> 10031 <211> 94 <212> PRT <213> Enterobacter cloacae

 <400> 10031

 Lys Thr Val Thr Lys Gln His Lys Pro Lys Ser Glu Lys Pro Met Leu

 1
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 10
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 Ser Pro Gln Ala Glu Leu Asp Leu Leu Glu Asn Asp Glu Arg Leu Asp 20
 25
 30

 Ala Leu Leu Glu Arg Leu Glu Glu Gly Glu Thr Leu Thr Ala Glu Glu 35
 40
 45

 Gln Ser Trp Val Asp Ala Lys Leu Asp Arg Ile Asp Glu Leu Met Gln 50
 55
 60

 Lys Leu Gly Leu Ser Tyr Asp Asp Glu Asp Asp Glu Glu Glu Asp Glu 65
 70
 75
 80

 Lys Gln Glu Asp Met Met Arg Leu Leu Lys Gly Gly Asn
 61
 61
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<210> 10032 <211> 316 <212> PRT <213> Enterobacter cloacae

<400> 10032 Thr Phe Gly Glu Ile Lys Met Lys Ala Ser Glu Ile Ala Glu Gly Ile Thr Met Thr Arg Ile Val Cys Val Gly Ile Thr Val Leu Asp Arg Ile 20 Trp Tyr Leu Asp Asp Leu Pro Lys Glu Gly Gly Lys Tyr Val Ala Lys 40 Asp Tyr Thr Glu Val Gly Gly Bro Ala Ala Thr Ala Ala Val Ala 55 Ala Ala Lys Leu Gly Ala Glu Val Asp Phe Ile Gly Arg Val Gly Asp 70 75 Asp Asp Thr Gly Arg Arg Leu Leu Ala Glu Leu Glu Ser Leu Gly Val 85 90 Asn Thr Arg Tyr Thr Arg Val Val Lys Gly Ala Arg Ser Ser Gln Ser 100 105 Ala Val Leu Val Asp Gly Ser Gly Glu Arg Val Ile Ala Asn Tyr Ser 120 Ser Pro Asp Leu Pro Ala Val Ala Asp Trp Leu Gln Glu Ile Asp Phe 135 Ser Gln Trp Asp Ile Val Leu Ala Asp Val Arg Trp His Asp Gly Ala 150 155 Lys Gln Ala Phe Thr Leu Ala Arg Gln Gln Gly Val Pro Thr Leu Leu 165 170 Asp Ala Asp Val Thr Pro Gln Asp Ile Ala Glu Leu Ile Ala Leu Ser 180 185 190 Asp His Ala Ala Phe Ser Ala Pro Gly Leu Arg Arg Leu Thr Gln Arg 200 205 Asp Asp Thr Glu Asp Ala Leu Lys Lys Ala Gln Thr Leu Thr Asn Gly 215 220 His Val Tyr Val Thr Gln Gly Arg Asp Gly Cys Phe Trp Leu Glu Asn 230 235 Gly Ala Leu Cys His Gln Pro Gly Phe Glu Val Asn Val Val Asp Thr 250 245 Thr Gly Ala Gly Asp Val Phe His Gly Ala Leu Ala Val Ser Leu Gly 260 265 Gln Lys Leu Pro Ala Ala Asp Ala Val Arg Phe Ala Ser Ala Val Ala 280 285 Ala Leu Lys Cys Thr Lys Pro Gly Gly Arg Ala Gly Ile Pro Asp Cys 300 295

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Asp Gln Thr Arg Ser Phe Leu Ser Leu Phe Val
                    310
<210> 10033
<211> 154
<212> PRT
<213> Enterobacter cloacae
<400> 10033
Lys Thr Thr Arg Ser Arg Pro Thr Met Ile Ala Leu Ile Gln Arg Val
Thr Arg Ala Ser Val Thr Val Ala Asp Glu Val Thr Gly Glu Ile Gly
                                25
Pro Gly Leu Leu Val Leu Leu Gly Val Glu Lys Asp Asp Glu Gln
                            40
Lys Ala Asn Arg Leu Cys Glu Arg Val Leu Gly Tyr Arg Ile Phe Ser
                        55
Asp Ala Glu Gly Lys Met Asn Leu Asn Val Gln Gln Ala Gly Gly Ser
                    70
Val Leu Val Val Ser Gln Phe Thr Leu Ala Ala Asp Thr Glu Arg Gly
                                    90
Met Arg Pro Ser Phe Ser Lys Gly Ala Ala Pro Glu Arg Ala Glu Ala
            100
                                105
                                                    110
Leu Tyr Glu Tyr Phe Val Glu Arg Cys Arg Gln Gln Asp Met Asn Thr
                            120
Gln Thr Gly Arg Phe Ala Ala Asp Met Gln Val Ser Leu Val Asn Asp
                        135
Gly Pro Val Thr Phe Trp Leu Gln Val
                    150
<210> 10034
<211> 354
<212> PRT
<213> Enterobacter cloacae
<400> 10034
Gly Ala Gly Ala Arg Tyr Ala Arg Ala Ala Gly Gly Gly Thr Lys Leu
Lys Lys Ile Arg Lys Ile Met Ser Leu Lys Ala Ile Ala Lys Glu Leu
Gly Leu Ser Val Thr Thr Val Ser Arg Ala Leu Asn Gly Tyr Asp Asp
Val Ser Ala Glu Thr Arg Ala Arg Val Glu Ala Glu Ala Gln Arg Arg
                        55
Gly Tyr Arg Pro Asn Thr Phe Ala Arg Arg Leu Lys Met Gly Lys Ile
                                        75
Asp Ala Val Gly Leu Val Phe Pro Val His Pro Val Pro Leu Asn Asn
                85
                                    90
Ser Val Phe Met Asp Met Val Gly Glu Ile Ser His Glu Leu Ala Arg
                                105
                                                    110
His Glu Ile Asp Leu Leu Ile Ala Asp Asp Asp Leu Ala Asp Lys
                            120
                                                125
His Ser Tyr Met Arg Met Val Gln Ser Arg Arg Val Asp Ala Leu Ile
                        135
                                            140
Val Ala His Thr Leu Asp His Asp Pro Arg Leu Glu Gln Leu Gln Ala
                    150
                                        155
Ala Gly Phe Pro Phe Leu Ala Leu Gly Arg Ser Gln Leu Pro Gln Pro
                                    170
Tyr Ala Trp Phe Asp Phe Asp Asn Tyr Ala Gly Thr Tyr Gln Ala Thr
                               185
```

Arg Trp Leu Ile Glu Lys Gly His Gln Arg Ile Ala Leu Leu Gly Glu

```
5537
        195
                            200
Ser Asn Asn Gln Ala Phe Ile Thr Gln Arg Arg Gln Gly Tyr Leu Asp
                       215
                                            220
Ala Leu Arg Glu Ala Gly Leu Ser Ser Glu Trp Leu Arg Ala Met Pro
                    230
                                       235
Pro Ser Arg Arg Val Gly Tyr Ala Thr Thr Gln Glu Leu Leu Ser Leu
                245
                                    250
Pro Gln Pro Pro Thr Ala Ile Ile Thr Asp Cys Asn Thr His Gly Asp
                                265
Gly Ala Ala Met Ala Leu Ala Gln Met Gly Arg Leu Thr Gly Glu Asn
                            280
                                                285
Ala Val Ser Leu Val Val Tyr Asp Gly Leu Pro Gln Asp Ser Ile Val
                        295
                                            300
Asp Ile Asp Val Ala Ala Val Ile Gln Ser Thr Arg Gln Gly Val Gly
                    310
Lys Gln Ile Ala Asp Met Val Arg Gln Leu Ile Asn Gly Asp Asp Ile
                325
                                    330
Asp Thr Leu Gln Val Leu Trp Gln Pro Glu Phe Ser Pro Gly Gln Thr
                                345
Ala
<210> 10035
<211> 743
<212> PRT
<213> Enterobacter cloacae
<400> 10035
Ser His Glu Lys Phe Gln Thr Arg Ser Gln Ile Arg Asn Val Leu Val
                                    10
Cys Ile Arg Asn Val Ser Asp Gln Asn Ser Gly His Pro Asp Asp Arg
            20
                                25
Arg Cys Pro Met Gln Asp Ala Ile Phe Arg Leu Glu Ser Asn Thr Val
                            40
Asp Val Val Leu Lys Thr His Pro Phe Ala Glu Ile Leu Tyr Trp Gly
                        55
                                            60
Pro His Leu Gln His Phe Ser Pro Gln Asp Val Leu Ser Ile Ala Arg
                                        75
                    70
Pro Val Ala Asn Gly Arg Leu Asp Val Asp Ser Pro Val Thr Leu Met
                85
                                    90
Ala Glu Leu Gly His Gly Leu Phe Gly Ser Pro Gly Ile Glu Gly His
            100
                                105
Arg Gln Gly Leu Asp Gly Ser Pro Val Phe Lys Thr Thr Gln Val Gln
                            120
Gln Ala Leu Asn Ala Leu Thr Ile Thr Ala Glu Asp Glu His Ala Gly
                        135
Leu Arg Leu Thr Ser Glu Ile Thr Leu Asp Ala Ser Gly Val Leu Val
                    150
Val Arg His Gly Leu Thr Asn Leu Lys Thr Leu Ala Trp Gln Val Asp
```

165 170 175
Arg Phe Ala Val Thr Leu Pro Val Ala Glu Arg Ala Gln Glu Val Met
180 185 190

Ala Phe His Gly Arg Trp Ile Arg Glu Phe Gln Pro His Arg Val Thr
195
200
205
Leu Glu His Asp Ser Phe Val Ile Glu Asn Arg Arg Gly Lys Thr Ser

210 215 220

His Glu His Phe Pro Ala Leu Ile Ser Gly Thr Pro Ser Phe Ser Glu
225 230 235 240

Met His Gly His Val Trp Gly Val His Leu Gly Trp Ser Gly Asn His 245 250 255

Arg Leu Arg Ala Glu Ala Lys Thr Asp Gly Arg Arg Tyr Met Gln Ala

265 260 270 Glu Ala Leu Tyr Leu Pro Gly Glu Met Ala Ile Glu Glu Gly Glu Thr 280 285 Leu Trp Thr Pro Arg Leu Tyr Ala Ser His Ser Pro His Gly Leu Asn 295 300 Gly Met Ser Gln Gln Phe His Arg Tyr Leu Arg Asp Asn Val Ile Arg 310 315 Phe Pro Glu Asp Lys Pro Arg Pro Val His Leu Asn Thr Trp Glu Gly 325 330 Ile Tyr Phe Asp His Asp Pro Asp Tyr Ile Met Arg Met Ala Asp Glu 340 345 Ala Ala Leu Gly Val Glu Arg Phe Ile Ile Asp Asp Gly Trp Phe 360 Lys Gly Arg Asn Asp Asp His Ala Ala Leu Gly Asp Trp Tyr Leu Asp 375 Glu Lys Lys Tyr Pro Asn Gly Leu Lys Pro Val Ile Asp His Val Lys 395 390 Gln Leu Gly Met Glu Phe Gly Ile Trp Val Glu Pro Glu Met Ile Asn 410 Pro Asp Ser Asp Leu Tyr Arg Ala His Pro Asp Trp Val Leu Ala Leu 420 425 Pro Gly Tyr Ala Gln Ala Thr Gly Arg His Gln Leu Val Leu Asn Leu 435 440 445 Asn Ile Pro Gln Ala Phe Asp Tyr Leu Val Glu Arg Met Ser Trp Leu 455 460 Leu Gly Glu His Ala Val Asp Tyr Val Lys Trp Asp Met Asn Arg Glu 470 475 Leu Val Gln Pro Gly His Lys Gly Lys Ala Ala Ala Asp Ala Gln Thr 485 490 Arg Gln Phe Tyr Arg Leu Leu Asp Val Leu Gly Glu Arg Phe Pro His 505 500 Ile Glu Phe Glu Ser Cys Ser Ser Gly Gly Gly Arg Ile Asp Tyr Glu 520 Val Leu Thr Arg Cys His Arg Phe Trp Ala Ser Asp Asn Asn Asp Ala 535 540 Leu Glu Arg Asn Thr Ile Gln Arg Gly Met Ser Tyr Phe Phe Pro Pro 550 555 Glu Val Met Gly Ala His Ile Gly His His Lys Cys His Ala Thr Phe 565 570 Arg Gln His Ser Ile Gln Phe Arg Gly Leu Thr Ala Leu Phe Gly His 580 585 Met Gly Leu Glu Leu Asp Pro Leu Thr Val Asp Ala Gln Glu Arg Glu 595 600 Gly Tyr Arg His Tyr Ala Ala Leu Tyr Lys Arg Trp Arg Gly Val Ile 615 620 His His Gly Thr Gln Trp Arg Val Asp Met Pro Asp Ala Thr Thr Leu 630 635 Ala Gln Gly Ile Val Ser Glu Asp Lys Thr Gln Gly Leu Phe Leu Val Ser Gln Leu Ala Met Pro Asp Tyr Thr Leu Met Met Pro Leu Arg Met Pro Gly Leu Asp Ala Ser Ala Gln Tyr Arg Ile Thr Leu Leu Asp His 680 Pro Asn Ile Gln Ile Thr Gly Glu Gly His Thr Met Arg Lys Leu 695 700 Pro Ala Trp Met Asp Ala Pro Gln Thr Val Ser Gly Glu Trp Leu Met 710 715 Gln Ala Gly Ile Ala Leu Pro Ile Leu Asp Pro Glu Thr Thr Ile Leu 730 725 Ile Gly Val Glu Arg Val

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<210> 10036
<211> 365
<212> PRT
<213> Enterobacter cloacae
<400> 10036
Ile Thr Thr Ile Trp Pro Asp Leu Asn Gln Phe Ser Trp Lys Gly Leu
                                     10
Ile Tyr Tyr Leu Gln Tyr Ser Thr Val Glu Gln Phe Leu Pro Ala Ala
                                25
Asp Phe Asn Phe Ala Phe Leu Ser Ser Glu Val Val Met Ile Lys Lys
Ile Gly Val Leu Thr Ser Gly Gly Asp Ala Pro Gly Met Asn Ala Ala
                        55
Ile Arg Gly Val Val Arg Ala Ala Leu Thr Glu Gly Leu Glu Val Phe
                    70
                                        75
Gly Ile Tyr Asp Gly Tyr Leu Gly Leu Tyr Glu Asp Arg Met Val Gln
                                    90
                85
Leu Asp Arg Tyr Ser Val Ser Asp Met Ile Asn Arg Gly Gly Thr Phe
            100
                                105
                                                     110
Leu Gly Ser Ala Arg Phe Pro Glu Phe Arg Asp Glu His Ile Arg Glu
                            120
                                                 125
Val Ala Ile Glu Asn Met Lys Lys Arg Gly Leu Asp Ala Leu Val Val
                        135
                                             140
Ile Gly Gly Asp Gly Ser Tyr Met Gly Ala Lys Arg Leu Thr Glu Met
                    150
                                        155
Gly Phe Pro Cys Ile Gly Leu Pro Gly Thr Ile Asp Asn Asp Ile Lys
                                    170
                165
Gly Thr Asp Tyr Thr Ile Gly Tyr Phe Thr Ala Leu Gly Thr Val Val
            180
                                185
Glu Ala Ile Asp Arg Leu Arg Asp Thr Ser Ser His Gln Arg Ile
                            200
                                                 205
Ser Ile Val Glu Val Met Gly Arg Tyr Cys Gly Asp Leu Thr Leu Ala
                        215
                                             220
Ala Ala Ile Ala Gly Gly Cys Glu Phe Val Val Pro Glu Val Glu
                    230
                                        235
Phe Ser Arg Glu Asp Leu Val Ala Glu Ile Lys Ala Gly Ile Ala Lys
                245
                                    250
Gly Lys Lys His Ala Ile Val Ala Ile Thr Glu His Ile Cys Asp Val
            260
                                265
                                                     270
Asp Glu Leu Ala Lys Tyr Ile Glu Thr Glu Thr Lys Arg Glu Thr Arg
                            280
Ala Thr Val Leu Gly His Ile Gln Arg Gly Gly Ser Pro Gly Pro Tyr
                        295
Asp Arg Ile Leu Ala Ser Arg Met Gly Ala Tyr Ala Ile Glu Leu Leu
                    310
Leu Gln Gly His Gly Gly Arg Cys Val Gly Ile Gln Asn Glu Lys Leu
                325
                                    330
Val His His Asp Ile Ile Asp Ala Ile Glu Asn Met Lys Arg Pro Phe
                                345
Lys Gly Asp Trp Leu Asp Cys Ala Lys Lys Leu Tyr
                            360
<210> 10037
<211> 350
<212> PRT
<213> Enterobacter cloacae
<400> 10037
Ser Ser Val Ser Phe Leu Ala Arg Cys Ile His Gln Asn Thr Thr Gln
```

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10
Glu Ser Trp Ala Met Asn Lys Trp Gly Val Gly Leu Thr Leu Leu Leu
            20
                                25
Ala Ser Thr Ser Val Leu Ala Lys Asp Ile Gln Leu Leu Asn Val Ser
                            40
Tyr Asp Pro Thr Arg Glu Leu Tyr Asp Gln Tyr Asn Lys Ala Phe Ala
                        55
Ala His Trp Lys Gln Glu Thr Gly Asp Asn Val Val Arg Gln Ser
                    70
                                        75
His Gly Gly Ser Gly Lys Gln Ala Thr Ser Val Ile Asn Gly Ile Glu
                85
                                    90
Ala Asp Val Val Thr Leu Ala Leu Ala Tyr Asp Val Asp Ala Ile Ala
            100
                                105
Glu Arg Gly Arg Ile Asp Lys Asn Trp Ile Lys Arg Leu Pro Asp Asn
                            120
                                                125
Ser Ala Pro Tyr Thr Ser Thr Ile Val Phe Leu Val Arg Lys Gly Asn
                        135
                                            140
Pro Lys Gln Ile Lys Asp Trp Asn Asp Leu Ile Lys Pro Gly Val Ser
                    150
                                        155
Val Ile Thr Pro Asn Pro Lys Ser Ser Gly Gly Ala Arg Trp Asn Tyr
                                    170
                165
Leu Ala Ala Trp Gly Tyr Ala Leu His His Asn Asn Gly Asp Gln Ala
            180
                                185
                                                    190
Lys Ala Gln Asp Phe Val Lys Ala Leu Phe Lys Asn Val Glu Val Leu
                            200
                                                205
Asp Ser Gly Ala Arg Gly Ala Thr Asn Thr Phe Val Glu Arg Gly Ile
                        215
                                            220
Gly Asp Val Leu Ile Ala Trp Glu Asn Glu Ala Leu Leu Ala Thr Asn
                    230
                                        235
Glu Leu Gly Lys Asp Lys Phe Glu Ile Val Thr Pro Ser Glu Ser Ile
                245
                                    250
Leu Ala Glu Pro Thr Val Ser Val Val Asp Lys Val Val Asp Lys
                                265
                                                    270
Gly Thr Lys Ala Val Ala Glu Ala Tyr Leu Lys Tyr Leu Tyr Ser Pro
        275
                            280
Glu Gly Gln Glu Ile Ala Ala Lys Asn Phe Tyr Arg Pro Arg Asp Glu
                        295
                                            300
Ala Val Ala Lys Lys Tyr Glu Asn Ala Phe Pro Lys Leu Lys Leu Phe
Thr Ile Asp Asp Val Phe Gly Gly Trp Thr Lys Ala Gln Lys Glu His
                                    330
Phe Ser Asn Gly Gly Thr Phe Asp Gln Ile Ser Lys Arg
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<210> 10038

<211> 273

<212> PRT

<213> Enterobacter cloacae

<400> 10038

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Glu Ile Arg Arg Val Phe Tyr Leu Val Ile Ile Leu Arg Tyr Ser Phe 1 5 10 15

Ala Ser Ile Glu Asn Arg Glu Arg Val Val Lys Lys Ile Ile Leu Leu 20 25 30

Ile Leu Ile Val Ile Ala Leu Ala Ala Gly Gly Val Tyr Trp Met Lys 35 40 45

Ala Gly Asn Pro Asn Ala Leu Arg His Ile Val Leu Asp Gln Cys Val 50 55 60

Pro Asn Gln Leu His Asn Arg Asn Pro Ala Pro Cys Ala Gln Val Lys 65 70 75 80

Pro Asp Ala Gly Tyr Val Val Phe Lys Asp Arg Asn Gly Pro Leu Gln
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90 85 Tyr Leu Leu Met Pro Thr Tyr Arg Ile Asn Gly Thr Glu Ser Pro Leu 100 105 Leu Thr Glu Pro Gln Thr Pro Asn Phe Phe Trp Leu Ala Trp Gln Ser 120 125 Arg His Phe Met Ser Met Lys Arg Gly Ala Asp Val Pro Asp Ser Ala 135 140 Val Ser Leu Thr Ile Asn Ser Pro Thr Gly Arg Thr Gln Asn His Phe 155 His Ile His Ile Ser Cys Leu Arg Pro Asp Val Arg Glu Lys Leu Asn 170 Ala Ser Gln Gly Gln Ile Ser Thr Gln Trp Leu Pro Leu Pro Gly Gly 180 185 Leu Glu Gly His Glu Tyr Leu Ala Arg Arg Val Thr Glu Asn Glu Leu 200 Val Gln Arg Ser Pro Phe Met Met Leu Ala Glu Glu Leu Pro Glu Ala 215 220 Arg Asp His Met Gly Arg Phe Ala Leu Ala Met Ala Gln Gln Ser Asp 230 235 Gly Ser Phe Val Leu Leu Ala Thr Glu Arg Asn Leu Leu Thr Phe Asn 250 245 Arg Ala Ser Ala Glu Glu Leu Gln Asp His Gln Cys Asp Ile Leu Lys 260 265

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<210> 10039
<211> 611
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<212> PRT

<213> Enterobacter cloacae

<400> 10039 Gly Lys Val Val Ile Glu Lys Leu Arg Asn Ile Ala Ile Ile Ala His 10 Val Asp His Gly Lys Thr Thr Leu Val Asp Lys Leu Leu Gln Gln Ser 20 Gly Thr Phe Asp Ala Arg Ala Glu Thr Gln Glu Arg Val Met Asp Ser Asn Asp Leu Glu Lys Glu Arg Gly Ile Thr Ile Leu Ala Lys Asn Thr Ala Ile Lys Trp Asn Asp Tyr Arg Ile Asn Ile Val Asp Thr Pro Gly 70 His Ala Asp Phe Gly Gly Glu Val Glu Arg Val Met Ser Met Val Asp Ser Val Leu Leu Val Val Asp Ala Phe Asp Gly Pro Met Pro Gln Thr 105 Arg Phe Val Thr Lys Lys Ala Phe Ala His Gly Leu Lys Pro Ile Val 120 125 Val Ile Asn Lys Val Asp Arg Pro Gly Ala Arg Pro Asp Trp Val Val 135 140 Asp Gln Val Phe Asp Leu Phe Val Asn Leu Asp Ala Thr Asp Glu Gln 150 155 Leu Asp Phe Pro Ile Val Tyr Ala Ser Ala Leu Asn Gly Ile Ala Gly 170 165 Leu Asp His Glu Asp Met Ala Glu Asp Met Thr Pro Leu Tyr Gln Thr 185 190 180 Ile Val Asp Arg Val Pro Ala Pro Asn Val Asp Leu Glu Gly Thr Leu 200 205 Gln Met Gln Ile Ser Gln Leu Asp Tyr Asn Asn Tyr Val Gly Val Ile 215 220 Gly Ile Gly Arg Ile Lys Arg Gly Lys Val Lys Pro Asn Gln Gln Val

230 235 Thr Ile Ile Asp Ser Glu Gly Lys Thr Arg Asn Gly Lys Val Gly Lys 245 250 Val Leu Thr His Leu Gly Leu Glu Arg Ile Glu Ser Asp Ile Ala Glu 260 265 Ala Gly Asp Ile Ile Ala Ile Thr Gly Leu Gly Glu Leu Asn Ile Ser 280 Asp Thr Ile Cys Asp Pro Gln Asn Val Glu Ala Leu Pro Ala Leu Ser 295 Val Asp Glu Pro Thr Val Ser Met Phe Phe Asn Val Asn Thr Ser Pro 310 . 315 Phe Cys Gly Lys Glu Gly Lys Phe Val Thr Ser Arg Gln Ile Leu Asp 325 330 Arg Leu Asn Lys Glu Leu Val His Asn Val Ala Leu Arg Val Glu Glu 340 345 Thr Glu Asp Ala Asp Ala Phe Arg Val Ser Gly Arg Gly Glu Leu His 360 365 Leu Ser Val Leu Ile Glu Asn Met Arg Arg Glu Gly Phe Glu Met Ala 375 380 Val Ser Arg Pro Lys Val Ile Phe Arg Glu Ile Asp Gly Arg Lys Gln 390 395 Glu Pro Phe Glu Asn Val Thr Leu Asp Val Glu Glu Gln His Gln Gly 405 410 Ser Val Met Gln Ala Leu Gly Glu Arg Lys Gly Asp Leu Lys Asn Met 425 420 430 Asn Pro Asp Gly Lys Gly Arg Val Arg Leu Asp Tyr Val Ile Pro Ser 435 440 445 Arg Gly Leu Ile Gly Phe Arg Ser Glu Phe Met Thr Met Thr Ser Gly 455 450 460 Thr Gly Leu Leu Tyr Ser Thr Phe. Ser His Tyr Asp Asp Val Arg Pro 470 475 Gly Glu Val Gly Gln Arg Asn Asn Gly Val Leu Ile Ser Asn Gly Gln 485 490 Gly Lys Ala Val Ala Phe Ala Leu Phe Gly Leu Gln Asp Arg Gly Lys 500 505 510 Leu Phe Leu Gly His Gly Ala Glu Val Tyr Glu Gly Gln Ile Ile Gly 520 Ile His Ser Arg Ser Asn Asp Leu Thr Val Asn Cys Leu Thr Gly Lys 535 Lys Leu Thr Asn Met Arg Ala Ser Gly Thr Asp Glu Ala Thr Val Leu 550 555 Val Pro Pro Ile Lys Met Thr Leu Glu Gln Ala Leu Glu Phe Ile Asp 570 565 Asp Asp Glu Leu Val Glu Val Thr Pro Gln Ser Ile Arg Ile Arg Lys 585 Arg His Leu Thr Glu Asn Asp Arg Lys Arg Ala Met Arg Gly Ala Lys 600 Glu Asp 610 <210> 10040 -<211> 304 <212> PRT <213> Enterobacter cloacae <400> 10040 Asn Ala Gln Ser Pro Ala Gly Ala Arg Val Tyr Pro Thr Val Ile Lys 10 Pro Ala Leu Phe Cys His Phe Leu Tyr Lys Met Arg Gly Val Met Val 25

Phe Arg Gly Gln Pro Met Ser Leu Thr Glu Leu Thr Gly Asn Pro Arg

```
40
His Asp Gln Leu Leu Thr Leu Ile Ala Asp Arg Gly Tyr Met Asn Ile
                        55
                                             60
Asp Glu Leu Ala Gln Leu Leu Asp Val Ser Thr Gln Thr Val Arg Arg
                    70
                                        75
Asp Ile Arg Lys Leu Ser Glu Gln Gly Leu Ile Thr Arg His His Gly
               85
                                    90
Gly Ala Gly Arg Ala Ser Ser Val Val Asn Thr Ala Phe Glu Gln Arg
                                105
Glu Val Ser Leu Thr Glu Glu Lys Arg Ala Ile Ala Glu Ala Ile Ala
                            120
Asp Tyr Ile Pro Asp Gly Ser Thr Ile Phe Ile Thr Ile Gly Thr Thr
                        135
                                             140
Val Glu His Val Ala Arg Ala Leu Leu Asn His Asn His Leu Arg Ile
                    150
                                        155
Ile Thr Asn Ser Leu Arg Val Ala His Ile Leu Tyr Lys Asn Pro Arg
                                    170
                165
Phe Glu Val Met Val Pro Gly Gly Thr Leu Arg Pro His Asn Gly Gly
            180
                                185
Ile Ile Gly Pro Ala Ala Thr Ala Phe Val Ser Gly Phe Arg Ala Asp
        195
                            200
Tyr Leu Val Thr Ser Val Gly Ala Ile Glu His Asp Gly Ala Met Met
    210
                        215
                                             220
Glu Phe Asp Val Asn Glu Ala Ser Val Val Lys Thr Met Ile Ala His
                                         235
                    230
Ser Arg His Ile Leu Leu Ala Ala Asp His Thr Lys Tyr His Ala Ser
                245
                                    250
Ala Ala Val Glu Ile Gly Asn Val Ala Gln Ala Thr Ala Leu Phe Thr
            260
                                265
                                                     270
Asp Glu Leu Pro Gly Pro Ala Leu Gln Asn His Leu Lys Ser Ser Lys
                            280
Val Glu Val Val Glu Val Asn Ser Gly Glu Glu Gln Gln Ala Gly
<210> 10041
<211> 317
<212> PRT
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<213> Enterobacter cloacae

<400> 10041

Ser Val Arg Tyr His Leu His Ser Gly Asp Arg Lys Arg Asp Asp Thr Glu Leu Leu Cys Glu Ala Val Met Leu Lys Thr Val His Gln Lys Ala Asn His His Thr Arg Pro Leu Arg Ala Trp Leu Lys Leu Leu Trp His Arg Ile Asp Glu Asp Asn Met Thr Thr Leu Ala Gly Asn Leu Ala Tyr. Val Ser Leu Ser Leu Val Pro Leu Val Ala Val Ile Phe Ala Leu 70 75 Phe Ser Ala Phe Pro Met Phe Ala Asp Val Ser Met Gln Leu Arg His 85 90 Phe Val Phe Ala Asn Phe Ile Pro Ala Thr Gly Asp Val Ile Gln Asn 100 105 Tyr Ile Glu Gln Phe Val Ala Asn Ser Ser Lys Met Thr Ala Val Gly 120 125 Ala Cys Gly Leu Ile Val Thr Ala Leu Leu Met Tyr Ser Ile Asp 135 140 Ser Ala Leu Asn Thr Ile Trp Arg Ser Lys Lys Val Arg Pro Lys Val 155 150 Tyr Ser Phe Ala Val Tyr Trp Met Ile Leu Thr Leu Gly Pro Leu Leu

165 170 Ala Gly Ala Ser Leu Ala Ile Ser Ser Tyr Leu Leu Ser Leu Arg Trp 190 180 185 Ala Thr Asp Leu Asn Ser Val Ile Asp Asn Val Leu Arg Ile Phe Pro 200 195 205 Leu Ile Leu Ser Trp Leu Ser Phe Trp Leu Leu Tyr Ser Val Val Pro 215 220 Thr Thr Arg Val Pro Asn Arg Asp Ala Val Val Gly Ala Leu Val Ala 230 235 Ala Leu Leu Phe Glu Leu Gly Lys Lys Gly Phe Ala Leu Tyr Ile Thr 250 245 Met Phe Pro Ser Tyr Gln Leu Ile Tyr Gly Val Leu Ala Val Ile Pro 265 Ile Leu Phe Val Trp Val Tyr Trp Thr Trp Cys Ile Val Leu Leu Gly 280 Ala Glu Ile Thr Val Thr Leu Gly Val Tyr Arg Glu Leu Lys Lys Ala 295 Ala Glu Ala Glu Lys Gln Gln Glu Ala Asp Gln Pro 310 <210> 10042 <211> 304 <212> PRT

<213> Enterobacter cloacae

<400> 10042 Ser Ile Leu Cys Val Arg Pro Ala Val Cys Val Ala Ile Ala Gly Ser 10 Leu Pro Trp Leu Phe Arg Asn Thr Val Val Ser Lys Gln Asn Arg Val 20 25 Ala His Ala Ser Pro Leu Pro Ala Gly Ile Val Glu Leu Ser Val His 40 Arg Pro Pro His Ile Ser His Ala Thr Pro Asp Phe Leu Ala Glu Glu 55 60 Val Pro Val Ala Leu Ile Tyr Asn Gly Ile Ser His Val Val Met Met 70 75 Ala Ser Pro Lys Asp Leu Glu Leu Phe Ala Ile Gly Phe Ser Leu Ser 85 90 Glu Gly Ile Ile Ala His Pro Gln Glu Ile Tyr Gly Met Asp Val Val 105 His Ala Cys Asn Gly Leu Glu Val Gln Ile Glu Leu Ser Ser Arg Arg 120 Phe Met Gly Leu Lys Glu Arg Arg Arg Ala Leu Ala Gly Arg Thr Gly 135 140 Cys Gly Val Cys Gly Val Glu Gln Leu Asn Asp Ile Gly Lys Pro Ile 150 155 Ile Pro Leu Pro Phe Thr Gln Thr Phe Asn Leu Ala His Leu Asp Arg 165 170 Ala Leu Glu His Leu Asn Asp Val Gln Pro Ile Gly Gln Leu Ser Gly 180 185 190 Cys Thr His Ala Ala Ala Trp Ile Leu Pro Ser Gly Asn Ile Ala Gly 200 205 Gly His Glu Asp Val Gly Arg His Val Ala Leu Asp Lys Leu Leu Gly 215 220 Arg Arg Ala Arg Glu Ser Asn Val Trp Gln Gln Gly Ala Ala Leu Val 230 235 Ser Ser Arg Ala Ser Tyr Glu Met Val Gln Lys Ser Ala Met Cys Gly 245 250 Val Glu Ile Leu Phe Ala Val Ser Ala Ala Thr Thr Leu Ala Val Glu 265 Val Ala Glu Arg Cys Asn Leu Thr Leu Val Gly Phe Cys Lys Pro Gly

<212> PRT

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275
                           280
                                                285
Arg Ala Thr Ile Tyr Thr His Pro Gln Arg Leu Ile Val Asp Gln
                        295
<210> 10043
<211> 93
<212> PRT
<213> Enterobacter cloacae
<400> 10043
Gly Leu Ile Phe Ile Ser Ser Arg His Gly Ala Leu Ser Lys Gln Leu
                                    10
Asn Glu Arg Val Tyr Leu Met Lys Ser Ile Lys Thr Phe Val Ala Val
            20
                                25
Ile Ala Leu Ala Thr Ser Phe Gly Ser Phe Ala Ala Gln Thr Val Thr
                            40
Ala Ser Ala Ser Thr Leu Asp Gly Ala Glu Ala Lys Ile Ala Ala Gln
                        55
Ala Gln Glu Ala Gly Ala Ser Ser Tyr Lys Ile Thr Gln Ala Phe Thr
                    70
                                        75
Gly Asn Arg Val His Met Thr Ala Glu Leu Asn Lys
                85
<210> 10044
<211> 214
<212> PRT
<213> Enterobacter cloacae
<400> 10044
Pro Tyr Arg Thr Tyr Phe His Tyr Asn Glu Arg Ile Arg Asn Val Leu
                                    10
Gln Asp Glu Arg Phe Val Arg Tyr Arg Glu Lys Glu Ala Val Ile Met
            20
                                25
Thr Gln Pro Ile Ser Val Ile Ala Lys Ser Leu Val Arg Glu Arg Leu
Arg Thr Gly Leu Ser Leu Ala Glu Ile Ala Arg Arg Ala Gly Ile Ala
Lys Ser Thr Leu Ser Gln Leu Glu Ser Gly Asn Gly Asn Pro Ser Leu
                    70
Glu Thr Leu Trp Ser Leu Cys Val Ala Leu Asp Ile Pro Phe Ala Arg
Leu Leu Glu Pro Gln Gln Pro Val Thr Gln Val Ile Arg Arg Gly Glu
Gly Thr Lys Val Val Ala Gly Gln Ala Asn Tyr Glu Ala Ile Leu Leu
                            120
                                                125
Ala Ala Cys Pro Pro Gly Ala Arg Arg Asp Ile Tyr Leu Leu Thr
                        135
                                            140
Gln Pro Gly Ala Asp Arg Ile Ser Gln Pro His Pro Pro Gly Ser Val
                    150
                                        155
Glu His Ile Ile Val Thr Gln Gly Arg Ala Met Val Gly Leu Ile Asp
                165
                                    170
Ala Ala Glu Glu Leu Gly Pro Gly Asp Tyr Ile Cys Tyr Pro Ala Asp
                                                    190
                                185
Gln Pro His Ile Phe Lys Ala Leu Glu Pro Asp Thr His Ala Leu Leu
                         - 200
       195
Val Ala Glu Gln Asn
    210
<210> 10045
<211> 288
```

## <213> Enterobacter cloacae

<400> 10045 Glu Leu Phe Ser Leu Val Gly Ala Val Met Thr Val Leu His Ser Val Asp Phe Phe Pro Thr Gly Ala Ser Pro Val Ala Ile Glu Pro Arg Leu 25 Pro Gln Ala Ala Phe Pro Glu His His His Asp Phe His Glu Ile Val Ile Val Glu His Gly Thr Gly Ile His Val Phe Asn Gly Gln Pro Tyr 55 Thr Ile Ser Gly Gly Thr Val Cys Phe Val Arg Asp His Asp Arg His 70 75 Leu Tyr Glu His Thr Asp Asn Leu Cys Leu Thr Asn Val Leu Tyr Arg 8.5 90 Ser Pro Asp Ala Phe Gln Phe Leu Ser Gly Leu Asn Gln Leu Leu Pro 100 105 Gln Glu Lys Asp Gly His Tyr Pro Ser His Trp Arg Val Asn Gln Ser 120 125 Thr Leu Gln Gln Val Arg Gln Leu Val Ser Gln Met Glu Gln Ser Glu 135 140 Asp Gly Gln Glu Thr His Ala Ile Ala Thr Arg Glu Leu Leu Phe Met 150 155 Gln Leu Leu Val Leu Leu Arg Arg Ser Ser Leu Val Glu Gly Leu Glu 165 170 Asn Asn Asp Ala Arg Leu Asn Gln Leu Met Ala Trp Leu Glu Asp His 180 185 190 Phe Ala Glu Asp Val Cys Trp Glu Thr Leu Ala Asp Asp Phe Ser Leu 200 205 Ser Leu Arg Thr. Leu His Arg Gln Leu Lys Gln His Thr Gly Leu Thr 215 Pro Gln Arg Tyr Leu Asn Arg Leu Arg Leu Ile Lys Ala Arg His Leu 230 235 Leu Arg His Thr Asp Glu Ser Val Thr Asp Ile Ala Tyr Arg Cys Gly 245 250 Phe Gly Asp Ser Asn His Phe Ser Thr Leu Phe Arg Arg Glu Phe Ser 265 Trp Ser Pro Arg Asp Ile Arg Gln Gly Lys Asp Ala Leu Leu Gln 280

<210> 10046

<211> 442

<212> PRT

<213> Enterobacter cloacae

## <400> 10046

Lys Ile Leu Gln Glu Thr Gly Met Ser Leu Trp Leu Thr His Pro Leu Leu Leu Pro Ser Leu Ile Val Gly Val Thr Ile Val Leu Trp Ala Thr 25 Ser Leu Leu Pro Glu Phe Ile Thr Ala Leu Leu Phe Phe Thr Ala Ala 40 Met Ala Ala Arg Ile Ala Pro Pro Glu Val Ile Phe Gly Gly Phe Ala 55 Ser Ser Ala Phe Trp Leu Val Phe Ser Gly Phe Val Leu Gly Val Ala 70 75 Ile Arg Lys Thr Gly Leu Ala Asp Arg Ala Ala Arg Ala Leu Ser Ala 85 90 Lys Leu Thr Asp Ser Trp Val Leu Met Val Ala Ser Val Val Leu Leu 105 Ser Tyr Ala Leu Ala Phe Val Met Pro Ser Asn Met Gly Arg Ile Ala

```
115
                            120
                                                125
Leu Leu Met Pro Ile Val Ala Ala Met Ala Lys Arg Ala Gly Ile Pro
                       135
                                 140
Asp Gly Ser Arg Ala Trp Phe Gly Leu Ala Leu Ala Val Gly Phe Gly
                   150
                                       155
Thr Phe Gln Leu Ser Ala Thr Ile Leu Pro Ala Asn Val Pro Asn Leu
               165
                                   170
Val Met Ser Gly Ala Ala Glu Gly Ser Tyr Gly Ile His Leu Asn Tyr
                                185
Val Pro Tyr Leu Leu His Thr Pro Val Leu Gly Ile Leu Lys Gly
                           200
Leu Ile Leu Ile Gly Leu Ile Cys Trp Leu Phe Pro Gly Asn Pro Lys
                       215
                                            220
Pro Ala Lys Asp Leu Ala Pro Ser Glu Pro Met Gly Arg Asp Glu Lys
                    230
                                        235
Arg Leu Ala Trp Leu Leu Ala Val Val Leu Thr Met Trp Val Thr Glu
                245
                                    250
Ser Trp His Gly Val Gly Pro Ala Trp Thr Gly Leu Ala Ala Ser Val
           260
                                265
                                                    270
Val Val Met Leu Pro Arg Ile Gly Phe Ile Thr Gly Glu Glu Phe Ser
       275
                            280
                                                285
Ala Gly Val Asn Met Arg Thr Cys Ile Tyr Val Ala Gly Ile Leu Gly
                       295
                                            300
Leu Ala Ile Thr Val Thr Gln Thr Gly Ile Gly Ala Ala Val Gly Glu
                                        315
                    310
Thr Leu Leu His Ile Met Pro Leu Asp Ala Asp Arg Pro Phe Thr Ser
                                    330
                325
Phe Leu Ala Leu Thr Gly Ile Thr Thr Ala Leu Asn Phe Ile Met Thr
           340
                                345
Ala Asn Gly Val Pro Ala Leu Tyr Thr Thr Leu Ala Gln Ser Phe Ser
       355
                            360
                                                365
Asp Ala Thr Gly Phe Pro Leu Leu Ser Val Ile Met Ile Gln Val Leu
                       375
                                            380
Gly Tyr Ser Thr Pro Leu Leu Pro Tyr Gln Ala Ser Pro Ile Val Val
                    390
                                        395
Ala Met Gly Leu Gly Lys Val Pro Ala Lys Ala Gly Met Leu Leu Cys
                405
                                    410
Leu Ala Leu Ala Ile Ala Thr Tyr Leu Val Leu Leu Pro Leu Asp Tyr
                                425
Leu Trp Phe Ser Val Leu Gly Arg Leu
<210> 10047
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<211> 167

<212> PRT

<213> Enterobacter cloacae

<400> 10047

Leu Lys Arg Tyr Leu Val Gly Leu Ser Lys Gly His Asn Ser Arg Val 10 Lys Cys Gly Leu Asn Asn Asn Lys Glu Pro Tyr Met Thr Ile Gln Gln 20 25 Trp Leu Phe Ser Phe Lys Gly Arg Ile Gly Arg Arg Asp Phe Trp Ile 40 45 Trp Ile Ala Thr Trp Val Val Ala Met Leu Leu Phe Phe Val Ala 55 60 Tyr Asn Ala Trp Leu Ser Thr Gln Thr Ala Ala Phe Ala Leu Val Cys 70 75 Leu Leu Trp Pro Thr Ala Ala Val Val Lys Arg Leu His Asp Arg 90 Gly Arg Ser Gly Ala Trp Ala Phe Leu Ile Ile Leu Ala Trp Met Leu

105 100 110 Val Ala Gly Asn Trp Ser Leu Leu Pro Ser Ile Leu Pro Trp Val Val 120 125 Gly Arg Leu Leu Pro Thr Val Ile Phe Val Met Met Val Val Glu Leu 135 140 Gly Ala Phe Ile Gly Thr Gln Ser Glu Asn Lys Tyr Gly Lys Asp Thr 150 Leu Glu Val Lys Tyr Arg 165 <210> 10048 <211> 91 <212> PRT <213> Enterobacter cloacae <400> 10048 Ser Val Ala Leu Gln Phe Arg Arg Gly Arg Ile Met Ser Leu Glu Val 10 Phe Glu Lys Leu Glu Ser Lys Val Gln Gln Ala Ile Asp Thr Ile Thr 20 25 30 Leu Leu Gln Met Glu Ile Glu Glu Leu Lys Glu Lys Asn Asn Ser Leu 35 40 Ser Gln Glu Val Gln Asn Ala Gln His Ser Arg Glu Glu Met Glu Arg 55 60 Glu Asn Asn Gln Leu Arg Glu Gln His Asn Gly Trp Gln Glu Arg Leu 70 75 Gln Ala Leu Leu Gly Arg Met Glu Lys Val 85 <210> 10049 <211> 1073 <212> PRT <213> Enterobacter cloacae <400> 10049 Cys Lys Asn Arg Cys His Asp Arg Gln Arg Arg Pro Gln Leu Ile Pro 10 Tyr Leu Arg Ile Gln Ser Met Asp Phe Ser Arg Phe Phe Ile Asp Arg 20 Pro Ile Phe Ala Ala Val Leu Ser Ile Leu Ile Phe Ile Thr Gly Leu Ile Ala Ile Pro Leu Leu Pro Val Ser Glu Tyr Pro Asp Val Val Pro 55 Pro Ser Val Gln Val Arg Ala Glu Tyr Pro Gly Ala Asn Pro Lys Val 75 Ile Ala Glu Thr Val Ala Thr Pro Leu Glu Glu Ala Ile Asn Gly Val 90 8.5 Glu Asn Met Met Tyr Met Lys Ser Val Ala Gly Ser Asp Gly Val Leu 105 100 110 Val Thr Thr Val Thr Phe Arg Pro Gly Thr Asp Pro Asp Gln Ala Gln 120 125 115 Val Gln Val Gln Asn Arg Val Ala Gln Ala Glu Ala Arg Leu Pro Glu 135 140 Asp Val Arg Arg Leu Gly Ile Thr Thr Gln Lys Gln Ser Pro Thr Leu 150 155 Thr Leu Val Val His Leu Phe Ser Pro Gly Gly Lys Tyr Asp Ser Leu 165 170 Tyr Met Arg Asn Tyr Ala Thr Leu Lys Val Lys Asp Glu Leu Ala Arg 180 185 190 Leu Pro Gly Val Gly Gln Ile Gln Ile Phe Gly Ser Gly Glu Tyr Ala

200

Met Arg Val Trp Leu Asp Pro Asn Lys Val Ala Ala Arg Gly Leu Thr 215 220 Ala Ser Asp Val Val Thr Ala Met Gln Glu Gln Asn Val Gln Val Ser 230 235 Ala Gly Gln Leu Gly Ala Glu Pro Leu Pro Lys Glu Ser Asp Phe Leu 245 250 Ile Ser Ile Asn Ala Gln Gly Arg Leu His Thr Glu Glu Glu Phe Gly 265 Asn Ile Val Leu Lys Thr Thr Gln Asp Gly Thr Val Val Arg Leu Arg 280 Asp Val Ala Arg Ile Glu Met Gly Ser Gly Ser Tyr Ala Leu Arg Ser 295 Gln Leu Asn Asn Lys Asp Ala Val Gly Ile Gly Ile Phe Gln Ser Pro 310 315 Gly Ala Asn Ala Ile Asp Leu Ser Asn Ala Val Arg Ala Lys Met Asp 325 330 Glu Leu Ser Thr Arg Phe Pro Ala Asp Met Lys Trp Ala Ala Pro Tyr 340 345 Asp Pro Thr Val Phe Val Arg Asp Ser Ile Arg Ala Val Val Gln Thr 365 360 Leu Leu Glu Ala Val Val Leu Val Leu Val Val Ile Leu Phe Leu 375 380 Gln Thr Trp Arg Ala Ser Ile Ile Pro Leu Ile Ala Val Pro Val Ser 390 395 Val Val Gly Thr Phe Ser Ile Leu Tyr Leu Leu Gly Phe Ser Leu Asn 405 410 Thr Leu Ser Leu Phe Gly Leu Val Leu Ala Ile Gly Ile Val Val Asp 420 425 Asp Ala Ile Val Val Glu Asn Val Glu Arg Asn Ile Glu Glu Gly 435 440 Leu Ala Pro Leu Ala Ala Ala His Gln Ala Met Arg Glu Val Ser Gly 455 460 Pro Ile Ile Ala Ile Ala Leu Val Leu Cys Ala Val Phe Val Pro Met 470 475 Ala Phe Leu Ser Gly Val Thr Gly Gln Phe Tyr Lys Gln Phe Ala Val 485 490 Thr Ile Ala Ile Ser Thr Val Ile Ser Ala Ile Asn Ser Leu Thr Leu 500 505 Ser Pro Ala Leu Ala Ala Leu Leu Leu Lys Pro His Gly Ala Pro Lys 520 Asp Phe Pro Thr Arg Leu Ile Asp Arg Leu Phe Gly Trp Ile Phe Arg 535 540 Pro Phe Asn Arg Phe Phe Leu Arg Ser Ser Asn Gly Tyr Gln Gly Leu 550 555 Val Gly Lys Thr Leu Gly Arg Arg Gly Ala Val Phe Val Val Tyr Leu 570 Leu Leu Cys Ala Ala Gly Val Met Phe Lys Ala Val Pro Gly Gly 585 Phe Ile Pro Thr Gln Asp Lys Leu Tyr Leu Ile Gly Gly Val Lys Met 600 605 Pro Glu Gly Ser Ser Leu Ala Arg Thr Asp Ala Val Ile Arg Lys Met 615 .620 Ser Glu Ile Gly Met Asn Thr Glu Gly Val Asp Tyr Ala Val Ala Phe 630 635 Pro Gly Leu Asn Ala Leu Gln Phe Thr Asn Thr Pro Asn Thr Gly Thr 645 650 Val Phe Phe Gly Leu Lys Pro Phe Asp Gln Arg Lys His Ser Ala Ala 665 670 Glu Ile Asn Ala Glu Ile Asn Ala Lys Ile Ala Gln Ile Gln Gly 680 Phe Gly Phe Ser Ile Leu Pro Pro Pro Ile Leu Gly Leu Gly Gln Gly

```
695
                                           700
Ser Gly Tyr Ser Leu Tyr Ile Gln Asp Arg Ala Gly Leu Gly Tyr Gly
                   710
                                   715
Ala Leu Gln Asn Ala Val Asn Thr Met Ser Gly Ala Ile Met Gln Thr
               725
                                    730
Pro Gly Met His Phe Pro Ile Ser Thr Tyr Gln Ala Asn Val Pro Gln
                               745
Leu Asp Val Gln Val Asp Arg Asp Lys Ala Lys Ala Gln Gly Val Ser
                            760
Leu Thr Asp Leu Phe Gly Thr Leu Gln Thr Tyr Leu Gly Ser Ser Tyr
                        775
Val Asn Asp Phe Asn Gln Phe Gly Arg Thr Trp Arg Val Met Ala Gln
                                        795
                   790
Ala Asp Gly Gln Phe Arg Asp Ser Val Glu Asp Ile Ala Asn Leu Arg
               805
                                    810
Thr Arg Asn Ser Gln Gly Glu Met Val Pro Ile Gly Ser Met Val Asn
           820
                                825
Ile Thr Thr Tyr Gly Pro Asp Pro Val Ile Arg Tyr Asn Gly Tyr
                            840
                                                845
Pro Ala Ala Asp Leu Ile Gly Asp Ala Asp Pro Arg Val Leu Ser Ser
                       855
                                            860
Ala Gln Ala Met Thr Gln Leu Asp Ala Met Ser Lys Gln Ile Leu Pro
                   870
                                        875
        .
Asn Gly Met Asn Ile Glu Trp Thr Asp Leu Ser Phe Gln Gln Ala Thr
               885
                                    890
Gln Gly Asn Thr Ala Leu Ile Val Phe Pro Val Ala Val Leu Leu Ala
                                905
            900
                                                    910
Phe Leu Val Leu Ala Ala Leu Tyr Glu Ser Trp Thr Leu Pro Leu Ala
                            920
        915
                                                925
Val Ile Leu Ile Val Pro Met Thr Met Leu Ser Ala Leu Phe Gly Val
                       935
                                            940
Trp Leu Thr Gly Gly Asp Asn Asn Val Phe Val Gln Val Gly Leu Val
                   950
                                        955
Val Leu Met Gly Leu Ala Cys Lys Asn Ala Ile Leu Ile Val Glu Phe
               965
                                    970
Ala Arg Glu Leu Glu Ile Gln Gly Lys Gly Ile Met Glu Ala Ala Leu
           980
                                985
                                                    990
Glu Ala Cys Arg Leu Arg Leu Arg Pro Ile Val Met Thr Ser Ile Ala
        995
                            1000
                                                1005
Phe Ile Ala Gly Thr Ile Pro Leu Ile Leu Gly His Gly Ala Gly Ala
                       1015
                                            1020
Glu Val Arg Gly Val Thr Gly Ile Thr Val Phe Ser Gly Met Leu Gly
                   1030
                                        1035
Val Thr Leu Phe Gly Leu Phe Leu Thr Pro Val Phe Tyr Val Thr Leu
                1045
                                    1050
Arg Lys Phe Val Thr Arg Gly Lys Ala Glu Arg Glu Val Leu Pro Ala
                                1065
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<210> 10050
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<400> 10050

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Ile Gln Arg Ala Ser Leu Met Arg Asn Ile Thr Leu Arg His Ser Phe 1 5 10 15

Pro Arg Ser Arg Ile Gly Arg Ser Met Lys Ser Ile Leu Pro Gly Ala 20 25 30

Val Leu Ala Leu Leu Ala Thr Thr Ala Leu Ala Ala Asp Gln Arg Gln
```

<sup>&</sup>lt;211> 285

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
40
Gly Asn Val Leu Thr Leu Gly Gly Gly Val Asp Val Ala Pro Arg Tyr
                        55
Ser Gly Ser Asp Lys Ser Arg Val Ser Ala Ala Gln Val Val Asp Tyr
                    70
                                        75
Ala Met Ala Asn Gly Phe Phe Val Ser Thr Thr Arg Gly Ile Gly Tyr
                                    90
Gly Asn Ser Phe Gly Asn Leu Asp Tyr Asn Ala Ala Leu Ser Tyr Arg
                                105
Ala Gly Arg Lys Asp Arg Asp Val Ser Ser Asp Ser Ile Ala Ser Gly
                            120
Ser Asp Asp Leu Arg Gly Met Gly Asp Ile Lys Gly Ser Ala Ile Val
                        135
                                            140
Val Pro Gly Leu Gly Tyr Arg Val Thr Asp Trp Leu Thr Val Gln Leu
                    150
                                        155
Gln Ala Glu Val Pro Val Ser Glu Arg Asp Asn Gly Glu Ala Val His
                165
                                    170
Phe Gly Ile Ala Ser Pro Phe Tyr Thr Ser Pro Lys Asn Ala Leu Thr
            180
                                185
Leu Ala Leu Thr Gly Ser Trp Gly Ser Ser Lys Tyr Val Gln Thr Tyr
                            200
Tyr Gly Val Asn Ala Ala Gln Ser Ala Ala Ser Gly Phe Ala Arg His
    210
                        215
                                            220
Asp Ala Gly Ser Gly Leu Tyr Ala Tyr Ser Leu Asn Leu Asp Trp Thr
                    230
                                        235
His Lys Leu Thr Ser Arg Trp Ser Leu Leu Ala Ala Gly Val Thr
                245
                                    250
Gln Leu Thr Gly Glu Ala Gly Asp Ser Pro Ile Val Gln Arg Lys Thr
            260
                                265
Ser Pro Val Gly Ser Leu Lys Val Thr Tyr Ser Phe
                            280
```

<210> 10051 <211> 301

<212> PRT

<213> Enterobacter cloacae

<400> 10051

Glu Lys Leu Cys Met Thr Thr Leu Asn Leu Gly His Leu Ala Thr Phe Arg Leu Val Val Gln Arg Gly Ser Phe Ser Ala Ala Ala Asp Val Met Gly Ile Ser Gln Pro Ala Val Ser Leu Gln Ile Arg Gln Leu Glu Gln Phe Leu Gln Thr Arg Leu Ile Glu Arg Thr Gly Arg Gly Ile Lys Ala Thr Ala Ala Gly Glu Ala Leu Arg Val His Gly Glu Arg Leu Glu Leu 75 Ala Val Glu Glu Thr Ile Arg Ser Val Ser Ala Phe Asn Gln Glu Val 85 90 Ser Gly Thr Ile Thr Leu Gly Thr Gly Ala Thr Ala Cys Ile His Leu 105 100 110 Leu Pro Ala Leu Leu Gln Gln Leu Arg Glu Glu Tyr Pro Leu Leu Arg 120 Ile Gly Val Thr Thr Gly Asn Thr Pro Asp Ile Val Arg Ala Ile Glu 135 140 Glu Asn Arg Leu Asp Met Gly Leu Val Thr Leu Pro Ala Ser Gly Arg 150 155 Thr Leu Ala Ile Met His Ala Met Glu Glu Glu Phe Val Trp Ile Gly 165 170 Ala Gln Val Gln Pro Glu Glu Gly Glu Gln Phe Thr Pro Asp Ser Leu

180 185 Tyr Ala Gln Pro Leu Ile Ala Phe Glu Ser Gly Ser Gly Thr Arg Thr 195 200 205 Leu Ile Asp Gly Trp Phe Glu Ala Arg Gly Leu Ala Val Ser Pro Val 215 220 Met Gln Leu Gly Ser Ile Glu Ala Ile Lys Arg Met Val Arg Ala Gly 230 235 Leu Gly Tyr Ser Ile Val Pro Arg Met Ala Val Glu His Ala Asp Asp 245 250 Arg Glu Gly Leu Arg Val Gln Ser Leu Thr Pro Val Leu Arg Arg Gln 265 Leu Ala Ile Val Met Arg Gln Asp Lys Ile Leu Ser Lys Gly Met Thr 280 Val Ile Ile Arg Leu Leu Gln Arg Glu His Gly Arg 295 <210> 10052 <211> 436 <212> PRT <213> Enterobacter cloacae <220> <221>UNSURE <222>(224) <400> 10052 His Ser Glu Glu Asn Thr Met Thr Arg Arg Ala Ile Gly Val Ser Glu 10 Arg Pro Pro Leu Gln Thr Ile Pro Leu Ser Leu Gln His Leu Phe 20 25 Ala Met Phe Gly Ala Thr Val Leu Val Pro Ile Leu Phe His Ile Asn 40 Pro Ala Thr Val Leu Leu Phe Asn Gly Ile Gly Thr Leu Leu Tyr Leu 55 Phe Ile Cys Lys Gly Lys Ile Pro Ala Tyr Leu Gly Ser Ser Phe Ala 70 Phe Ile Ser Pro Val Leu Leu Leu Pro Leu Gly Tyr Glu Val Ala 90 Leu Gly Gly Phe Ile Met Cys Gly Val Leu Phe Cys Leu Val Ser Phe 105 Ile Val Lys Lys Ala Gly Thr Gly Trp Leu Asp Val Met Phe Pro Pro 120 125 Ala Ala Met Gly Ala Ile Val Ala Val Ile Gly Leu Glu Leu Ala Gly 135 140 Val Ala Ala Asn Met Ala Gly Leu Leu Pro Ala Asp Gly Gln Ser Pro 150 155 Asp Ser Lys Thr Ile Ile Ile Ser Leu Val Thr Leu Gly Val Thr Val 165 170 Phe Gly Ser Val Leu Phe Arg Gly Phe Met Ala Ile Ile Pro Ile Leu 180 185 190 Ile Gly Val Leu Ala Gly Tyr Ala Leu Ser Phe Val Met Gly Val Val 200 205 Asp Thr Thr Pro Ile Ala Glu Ala His Trp Phe Ala Leu Pro Thr Xaa 215 220 Tyr Thr Pro Arg Phe Glu Trp Phe Ala Ile Phe Thr Ile Leu Pro Ala 230 235 Ala Leu Val Val Ile Ala Glu His Val Gly His Leu Val Val Thr Ala 245 250 Asn Ile Val Lys Arg Asp Leu Ile Arg Asp Pro Gly Leu His Arg Ser 265

Met Phe Ala Asn Gly Phe Ser Thr Ile Ile Ser Gly Phe Phe Gly Ser

```
275
                            280
                                                285
Thr Pro Asn Thr Thr Tyr Gly Glu Asn Ile Gly Val Met Ala Ile Thr
                       295
                                            300
Arg Val Tyr Ser Thr Trp Val Ile Gly Gly Ala Ala Ile Ile Ala Ile
                    310
                                        315
Leu Leu Ser Cys Val Gly Lys Leu Ala Ala Ala Ile Gln Ile Ile Pro
                                    330
Val Pro Val Met Gly Gly Val Ser Leu Leu Tyr Gly Val Ile Gly
                                345
Ala Ser Gly Ile Arg Val Leu Ile Glu Ser Lys Val Asp Tyr Ser Lys
                            360
Ala Gln Asn Leu Ile Leu Thr Ser Val Ile Leu Ile Ile Gly Val Ser
                        375
Gly Ala Lys Val His Ile Gly Ala Ala Glu Leu Lys Gly Met Ala Leu
                    390
                                        395
Ala Thr Ile Val Gly Val Gly Leu Ser Leu Ile Phe Lys Leu Ile Ser
                405
                                    410
Val Ile Arg Pro Glu Glu Val Val Leu Asp Ala-Asp Asp Ser Glu Lys
                                425
Ala Pro His
        435
<210> 10053
<211> 248
<212> PRT
<213> Enterobacter cloacae
<400> 10053
Thr Pro Phe Arg Phe Tyr Val Arg Ser Leu Val Glu Val Phe Leu Asn
                                    10
Gly Pro Ala Gln Leu Ser Leu Pro Leu Tyr Leu Pro Asp Asp Glu Thr
            20
                                25
                                                    30
Phe Ala Ser Phe Trp Pro Gly Asp Asn Pro Ser Leu Leu Ala Ala Leu
                            40
Gln Asn Val Leu Arg Gln Glu His Ser Gly Tyr Ile Tyr Ile Trp Ser
                        55
Arg Glu Gly Ala Gly Arg Ser His Leu Leu His Ala Ala Cys Ala Glu
                    70
                                        75
Leu Ser Ala Arg Gly Asp Ala Val Gly Tyr Val Pro Leu Asp Lys Arg
                85
                                    90
Thr Trp Phe Val Pro Glu Val Leu Glu Gly Met Glu His Leu Ser Leu
                                105
Val Cys Ile Asp Asn Ile Glu Cys Val Ala Gly Asp Glu Pro Trp Glu
                            120
Met Ala Ile Phe Asn Leu Tyr Asn Arg Ile Leu Glu Ser Gly Lys Thr
                        135
                                            140
Arg Leu Leu Ile Thr Gly Asp Arg Pro Pro Arg Gln Leu Asn Leu Gly
                    150
                                        155
Leu Pro Asp Leu Ala Ser Arg Leu Asp Trp Gly Gln Ile Tyr Lys Leu
                                    170
                165
Gln Pro Leu Ser Asp Glu Asp Lys Leu Gln Ala Leu Gln Leu Arg Ala
            180
                                185
                                                    190
Arg Leu Arg Gly Phe Glu Leu Pro Glu Asp Val Gly Arg Phe Leu Leu
                            200
                                                205
Lys Arg Leu Asp Arg Glu Met Arg Thr Leu Phe Asp Thr Leu Asp Gln
                                            220
                        215
Leu Asp Arg Ala Ser Ile Thr Ala Gln Arg Lys Leu Thr Ile Pro Phe
                   230
                                        235
Val Lys Asp Ile Leu Lys Leu
                245
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<210> 10054
<211> 248
<212> PRT
<213> Enterobacter cloacae
<400> 10054
Ile Gln Ile Ile Thr Pro Gly Val Met Lys Met Gln Lys Gln Ala Glu
Leu Tyr Arg Gly Lys Ala Lys Thr Val Tyr Ser Thr Glu Asn Pro Asp
                                25
Leu Leu Val Leu Glu Phe Arg Asn Asp Thr Ser Ala Gly Asp Gly Ala
Arg Ile Glu Gln Phe Asp Arg Lys Gly Met Val Asn Asn Lys Phe Asn
                        55
His Phe Ile Met Thr Lys Leu Ala Glu Ala Gly Ile Pro Thr Gln Met
                    70
                                        75
Glu Ala Leu Leu Ser Asp Thr Glu Cys Leu Val Lys Lys Leu Asp Met
                                    90
Val Pro Val Glu Cys Val Ile Arg Asn Arg Ala Ala Gly Ser Leu Val
            100
                                105
Lys Arg Leu Gly Ile Glu Gly Ile Glu Leu Asn Pro Pro Leu Phe
        115
                            120
                                                125
Asp Leu Phe Leu Lys Asn Asp Ala Met His Asp Pro Met Val Asn Glu
                        135
    130
                                            140
Ser Tyr Cys Glu Thr Phe Gly Trp Val Ser Lys Glu Asn Leu Ala Arg
                    150
                                        155
Met Gln Glu Leu Thr Tyr Lys Ala Asn Asp Val Leu Lys Lys Leu Phe
                165
                                    170
Asp Asp Ala Gly Leu Ile Leu Val Asp Phe Lys Leu Glu Phe Gly Leu
            180
                                185
Tyr Lys Gly Glu Val Val Leu Gly Asp Glu Phe Ser Pro Asp Gly Ser
        195
                            200
Arg Leu Trp Asp Lys Glu Thr Leu Asp Lys Met Asp Lys Asp Arg Phe
    210
                        215
                                            220
Arg Gln Ser Leu Gly Gly Val Val Glu Ala Tyr Glu Ala Val Ala His
                    230
                                        235
Arg Leu Gly Val Lys Leu Asp
                245
<210> 10055
<211> 294
<212> PRT
<213> Enterobacter cloacae
<400> 10055
Phe Glu Val Phe Met Arg Trp Gln Gly Arg Arg Glu Ser Asp Asn Val
Glu Asp Arg Arg Ser Ser Gly Gly Gly Pro Ser Met Gly Gly Pro
Gly Phe Arg Leu Pro Ser Gly Lys Gly Gly Ile Ile Leu Leu Val Val
Val Leu Val Ala Gly Tyr Tyr Gly Val Asp Leu Thr Gly Leu Met Thr
                        55
Gly Glu Thr Gly Gln Gln Gln Tyr Ser Gln Arg Ser Ile Ser Pro
                                        75
                    70
Asn Glu Asp Glu Ala Ala Lys Phe Thr Ser Val Ile Leu Ala Thr Thr
                85
                                    90
Glu Asp Thr Trp Gly Gln Gln Phe Glu Lys Met Gly Arg Thr Tyr Gln
            100
                                105
Pro Pro Lys Leu Val Met Tyr Arg Gly Ala Thr Arg Thr Gly Cys Gly
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Thr Gly Gln Ser Val Met Gly Pro Phe Tyr Cys Pro Ala Asp Ser Thr
                       135
                                            140
Val Tyr Ile Asp Leu Ser Phe Tyr Asp Asp Met Lys Ser Lys Leu Gly
                   150
                                        155
Ala Asp Gly Asp Phe Ala Gln Gly Tyr Val Ile Ala His Glu Val Gly
               165
                                   170
His His Val Gln Lys Leu Leu Gly Ile Glu Pro Lys Val Arg Gln Met
                                185
Gln Gln Asn Ala Ser Gln Ala Glu Met Asn Arg Leu Ser Val Arg Met
                            200
                                                205
Glu Leu Gln Ala Asp Cys Phe Ala Gly Val Trp Gly His Ser Met Gln
                        215
                                            220
Gln Gln Gly Val Leu Glu Thr Gly Asp Leu Glu Glu Ala Leu Asn Ala
                    230
                                        235
Ala Gln Ala Ile Gly Asp Asp Arg Leu Gln Gln Ser Gln Gly Arg
                245
                                    250
Val Val Pro Asp Ser Phe Thr His Gly Thr Ser Glu Gln Arg Tyr Ser
           260
                                265
                                                    270
Trp Phe Lys Arg Gly Phe Asp Ser Gly Asn Pro Ser Gln Cys Asn Thr
       275
                            280
Phe Gly Lys Ala Met
   290
<210> 10056
<211> 268
<212> PRT
<213> Enterobacter cloacae
<400> 10056
Lys Pro Thr Phe Cys Asn Gly Asn Phe Phe Asn Asp Phe Phe Ser Lys
1
                                    10
Val Ala Trp Ser Leu Pro Arg Arg Gly Val Lys Ser Cys Leu Ser Ile
           20
                                25
Lys Glu Ile Ala Met Lys His Asp His Phe Val Val Gln Ser Pro Asp
                            40
Thr Pro Ala Lys Gln Leu Leu Leu Phe His Gly Val Gly Asp Asn
                                            60
Ala Val Asn Met Gly Gln Ile Gly Ser Trp Phe Ala Pro Val Phe Pro
                    70
His Ala Leu Ile Val Ser Ile Gly Gly Val Glu Pro Cys Gly Pro Asp
                                    90
Gly Arg Gln Trp Phe Ser Val Glu Gly Val Thr Glu Glu Asn Arg Gln
                                105
Ala Arg Ile Asp Ala Val Met Pro Ala Phe Ile Asp Thr Val Arg Tyr
                            120
Trp Gln Gln Ser Gly Val Gly Ala Asp Ala Thr Ala Leu Ile Gly
                        135
                                            140
Phe Ser Gln Gly Ser Ile Met Ser Leu Glu Ser Val Lys Ala Gln Pro
                   150
                                        155
Gly Leu Val Ser Arg Val Ile Ala Phe Asn Gly Arg Phe Ala Thr Leu
               165
                                    170
Pro Gln Ser Ala Thr Thr Gln Thr Thr Ile His Leu Ile His Gly Gly
           180
                                185
Glu Asp Arg Val Ile Glu Leu Ser His Ala Val Ala Ala Gln Glu Thr
                            200
                                                205
Leu Met Arg Glu Gly Gly Asp Val Thr Leu Asp Ile Val Asp Asp Leu
                       215
                                           220
Gly His Ala Ile Asp Asp Arg Ser Met Gln Phe Ala Leu Asp His Leu
                   230
                                       235
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Arg Tyr Thr Val Pro Lys His Tyr Phe Asp Glu Ala Leu Ser Gly Ala

Lys Pro Asn Asp Asp Ile Val Glu Phe Met 260 265

<210> 10057 <211> 686

<212> PRT <213> Enterobacter cloacae <400> 10057 Thr Leu Arg Arg His Ala Ala Val Gly Lys Tyr Asp Asn Asn Arg Lys 10 Asn Lys Val Ile Glu Pro Lys Thr Gly Val Val Met Asn Arg Phe Ile 20 2.5 Met Ala Asn Ala Gln Gln Cys Ile Gly Cys Arg Ala Cys Glu Val Ala 35 40 45 Cys Val Met Ala His Asn Gly Glu Gln His Ala Leu Ser Glu Arg His 55 Phe His Pro Arg Ile Thr Val Leu Thr Ser Gly Leu Arg Lys Ser Pro 70 75 Val Thr Cys His His Cys Glu Asn Ala Pro Cys Ala Gln Ser Cys Pro 85 90 Asn Gly Ala Ile Thr Gln His Ser Asp Ser Val Gln Val Asn Gln Gln 100 105 Lys Cys Ile Gly Cys Lys Ala Cys Val Val Ala Cys Pro Phe Gly Thr 120 Met Asp Met Leu Ile Ala Pro Leu Glu Asn Asp Ser Val Lys Ala Ser 135 Ala His Lys Cys Asp Leu Cys Leu Glu Arg Pro Gln Gly Pro Ala Cys 150 155 Val Glu Asn Cys Pro Ala Glu Val Leu Thr Leu Ala Thr Pro Ala Val 170 Leu Asp Lys Leu Val Lys Gln Arg Arg Gln Arg Ser Ala Arg Leu Asp 185 190 Ala Leu Pro Trp His Ser Glu Ala Val Gln Ser Val Pro Pro Gln Thr 200 Lys Arg Gln Gln Met Gln Asn Thr Pro Ala Arg Gly Glu Pro Asp Lys 220 Leu Ser Pro Asp Ala Arg Ala Gly His Phe Asn Glu Ile Tyr Leu Pro 230 Phe Arg Pro Glu Gln Ala Gln Arg Glu Ala Ser Arg Cys Leu Lys Cys 245 250 Gly Asp His Ser Ile Cys Glu Trp Thr Cys Pro Leu His Asn His Ile 265 Pro Gln Trp Ile Glu Arg Ile Arg Ala Gly Asp Ile Ile Gly Ala Ala 280 285 Glu Leu Ser His Gln Thr Asn Cys Leu Pro Glu Ile Thr Gly Arg Val 295 300 Cys Pro Gln Asp Arg Leu Cys Glu Gly Ala Cys Thr Leu Arg Asp Ala 310 315 Ser Gly Ala Val Thr Ile Gly Asn Ile Glu Arg Tyr Ile Ser Asp Arg 330 325 Ala Leu Ala Met Gly Trp Thr Pro Asp Val Ser His Val Lys Pro Val 345 350 Gly Lys Arg Val Ala Ile Ile Gly Ala Gly Pro Ala Gly Leu Ala Cys 360 365 Ala Asp Val Leu Val Arg Ser Gly Val Gly Val Thr Val Tyr Asp Arg 375 380 His Pro Glu Ile Gly Gly Leu Leu Thr Phe Gly Ile Pro Ala Phe Lys 390 395 Leu Asp Lys Ser Leu Leu Ala Arg Arg Glu Ile Phe Ser Ala Met 410

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Gly Ile Arg Phe Glu Leu Asn Cys Glu Val Gly Lys Asp Val Ser Met
            420
                                425
Ala Gln Leu Gln Asn Asp Tyr Asp Ala Leu Phe Ile Gly Val Gly Thr
                            440
                                                445
Tyr Arg Ser Met Lys Ala Gly Ile Pro His Glu Asp Ala Pro Gly Val
                        455
                                            460
Tyr Asp Ala Leu Pro Phe Leu Val Ala Asn Thr Arg Asn Val Met Gly
                    470
                                        475
Leu Asp Pro Ala Ala Asp Glu Pro Phe Ile Asp Thr Gln Gly Leu Asn
                485
                                    490
Val Val Leu Gly Gly Gly Asp Thr Ala Met Asp Cys Val Arg Thr
                                505
Ala Leu Arg His Gly Ala Ala Lys Val Thr Cys Ala Tyr Arg Arg Asp
                                                 525
        515
                            520
Glu Ala Asn Met Pro Gly Ser Lys Lys Glu Val Lys Asn Ala Lys Glu
                        535
                                            540
Glu Gly Ala Ala Phe Glu Phe Asn Val Gln Pro Val Glu Leu Thr Leu
                    550
                                        555
Asp Thr Asp Gly Lys Val Asn Gly Ile Arg Met Leu Arg Thr Arg Leu
                                    570
                565
Gly Glu Pro Asp Ala Gln Gly Arg Arg Pro Val Pro Val Ala Gly
                                                     590
            580
                                585
Ser Glu Phe Val Met Pro Ala Asp Ala Val Ile Met Ala Phe Gly Phe
        595
                            600
                                                 605
Asn Pro His Ala Met Pro Trp Leu Gln Ala Gln Gly Val Asp Thr Asp
                        615
                                            620
Asp Trp Gly Arg Ile Lys Ala Ser Val Glu Ser Arg Tyr Arg Tyr Gln
                    630
                                         635
Thr Ser Asn Pro Gln Ile Phe Ala Gly Gly Asp Ala Val Arg Gly Ala
                645
                                    650
Asp Leu Val Val Thr Ala Met Ala Glu Gly Arg His Ala Ala Gln Gly
                                665
Ile Met Asp Trp Leu Gly Val Pro Pro Arg Asn Met His
        675
                            680
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<210> 10058 <211> 768

<212> PRT

<213> Enterobacter cloacae

<400> 10058

Pro Lys Arg Glu Arg Asn Asn Lys Met Asp Asp Gln Leu Lys Gln Ser 10 Ala Leu Asp Phe His Glu Phe Pro Val Pro Gly Lys Ile Gln Val Ser Pro Thr Lys Pro Leu Ala Thr Gln Arg Asp Leu Ala Leu Ala Tyr Ser Pro Gly Val Ala Ala Pro Cys Leu Glu Ile Glu Lys Asp Pro Leu Ala 55 Ala Tyr Lys Tyr Thr Ala Arg Gly Asn Leu Val Ala Val Ile Ser Asn 75 Gly Thr Ala Val Leu Gly Leu Gly Asn Ile Gly Ala Leu Ala Gly Lys 85 90 Pro Val Met Glu Gly Lys Gly Val Leu Phe Lys Lys Phe Ala Gly Ile 105 Asp Val Phe Asp Ile Glu Val Asp Glu Leu Asp Pro Asp Lys Phe Ile 125 120 Asn Val Val Ala Ala Leu Glu Pro Thr Phe Gly Gly Ile Asn Leu Glu 135 140 Asp Ile Lys Ala Pro Glu Cys Phe Tyr Ile Glu Gln Lys Leu Arg Glu 155

Arg Met Asn Ile Pro Val Phe His Asp Asp Gln His Gly Thr Ala Ile . Ile Ser Thr Ala Ala Ile Leu Asn Gly Leu Arg Val Val Glu Lys Asn Leu Ser Asp Val Arg Met Val Val Ser Gly Ala Gly Ala Ala Ile Ala Cys Met Asn Leu Val Ala Leu Gly Met Gln Lys His Asn Ile Val Val Cys Asp Ser Lys Gly Val Ile Tyr Lys Asp Arg Glu Pro Asn Met Ala Glu Thr Lys Ala Ala Tyr Ala Val Glu Asp Asp Gly Lys Arg Thr Leu Glu Asp Val Ile Glu Gly Ala Asp Ile Phe Leu Gly Cys Ser Gly Pro Lys Val Leu Thr Gln Glu Met Val Gln Lys Met Ala Arg Ala Pro Met Ile Leu Ala Leu Ala Asn Pro Glu Pro Glu Ile Leu Pro Pro Leu Ala Lys Ala Val Arg Glu Asp Ala Ile Ile Cys Thr Gly Arg Ser Asp Tyr Pro Asn Gln Val Asn Asn Val Leu Cys Phe Pro Phe Ile Phe Arg Gly Ala Leu Asp Val Gly Ala Thr Ala Ile Asn Glu Glu Met Lys Leu Ala Ala Val His Ala Ile Ala Glu Leu Ala His Ala Glu Gln Ser Glu Val Val Ala Ser Ala Tyr Gly Asp Gln Asp Leu Ser Phe Gly Pro Asp Tyr Ile Ile Pro Lys Pro Phe Asp Pro Arg Leu Ile Val Lys Ile Ala Pro Ala Val Ala Lys Ala Ala Met Asp Ser Gly Val Ala Thr Arg Pro Ile Glu Asp Phe Asp Ala Tyr Val Asp Lys Leu Thr Glu Phe Val Tyr Lys Thr Asn Leu Phe Met Lys Pro Ile Phe Ser Gln Ala Arg Ala Asp Ala Lys Arg Val Val Leu Ala Glu Glu Glu Ala Arg Val Leu His Ala Thr Gln Glu Leu Ile Thr Leu Gly Leu Ala Lys Pro Ile Leu Ile Gly Arg Pro Ser Val Ile Glu Met Arg Ile Gln Lys Leu Gly Leu Gln Ile Lys Pro Gly Val Asp Phe Glu Ile Val Asn Asn Glu Ser Asp Pro Arg Phe Lys Glu Tyr Trp Asn Glu Tyr Tyr Ser Ile Met Lys Arg Arg Gly Ile Thr Gln Glu Gln Ala Gln Arg Ala Val Ile Ser Asn Thr Thr Val Ile Gly Ala Ile Met Val His Arg Gly Glu Ala Asp Ala Leu Ile Cys Gly Thr Ile Gly Glu Tyr His Glu His Phe Ser Val Val Gln Glu Ile Phe Gly Tyr Arg Glu Gly Val His Thr Ala Gly Ala Met Asn Ala Leu Leu Pro Ser Gly Asn Thr Phe Ile Ala Asp Thr Tyr Val Asn Asp Asp Pro Ser Pro Glu Glu Leu Ala Glu Ile Thr Val Met Ala Ala Glu Thr Val Arg Arg Phe Gly Ile Glu Pro Lys Val Ala Leu Leu Ser His Ser Asn Phe Gly Ser Ser Lys Ser Ala Ala Cys Lys Met

645 650 Arg Gln Thr Leu Asp Leu Val Arg Glu Arg Ala Pro Glu Leu Met Ile 665 Asp Gly Glu Met His Gly Asp Ala Ala Leu Val Glu Ser Ile Arg Asn 680 685 Glu Arg Met Pro Asp Ser Pro Leu Lys Gly Ser Ala Asn Val Leu Ile 700 695 Met Pro Asn Val Glu Ala Ala Arg Ile Ser Tyr Asn Leu Leu Arg Val 710 715 Ser Ser Ser Glu Gly Val Thr Val Gly Pro Val Leu Met Gly Val Ser 725 730 Lys Pro Val His Val Leu Thr Pro Ile Ala Ser Val Arg Arg Ile Val 745 740 Asn Met Val Ala Leu Ala Val Val Glu Ala Gln Thr Gln Pro Leu 760 <210> 10059 <211> 175 <212> PRT <213> Enterobacter cloacae <400> 10059 His Tyr Ala Lys Phe Trp Arg Val Phe Pro Arg Leu Leu Ala Lys Cys Pro Val His Ala Ile Ile Thr Val Phe Lys Pro Glu Lys Ala Val Asn Thr Met Glu Ile Arg Val Phe Arg Gln Glu Asp Phe Glu Glu Val Ile 40 Thr Leu Trp Glu Arg Cys Asp Leu Leu Arg Pro Trp Asn Asp Pro Glu 55 Met Asp Ile Glu Arg Lys Val Asn His Asp Val Ser Leu Phe Leu Val 70 75 Ala Glu Val Asn Gly Glu Val Val Gly Thr Val Met Gly Gly Tyr Asp 90 Gly His Arg Gly Ser Ala Tyr Tyr Leu Gly Val His Pro Glu Tyr Arg 100 Ala Arg Gly Ile Ala Asn Ala Leu Leu Asn Arg Leu Glu Lys Lys Leu 115 120 Ile Ala Arg Gly Cys Pro Lys Ile Gln Ile Met Val Arg Glu Asp Asn 135 Asp Val Val Leu Gly Met Tyr Glu Arg Leu Gly Tyr Glu His Ala Asp 150 155 Val Leu Thr Leu Gly Lys Arg Leu Ile Glu Asp Glu Glu Tyr 165 170 <210> 10060 <211> 316 <212> PRT <213> Enterobacter cloacae <400> 10060 Pro Pro Ser Met Pro Arg Ser Arg Gly Ile Phe Phe Ser Gly Gly Ala 10 Met Ser Gln Val Gln Ser Gly Ile Leu Pro Glu His Cys Arg Ala Ala 25 Ile Trp Ile Glu Ala Asn Val Lys Gly Asp Val Asp Ala Leu Arg Ala Ala Ser Lys Val Phe Val Asp Lys Leu Ala Thr Phe Gln Ala Lys Phe Pro Glu Ala His Leu Gly Ala Val Val Ala Phe Gly Asn Thr Val Trp

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Arg Gln Leu Ser Gly Gly Glu Gly Ala Lys Glu Leu Lys Asp Phe Ile
                85
                                    90
Pro Tyr Gly Lys Gly Leu Ala Pro Ala Thr Gln Tyr Asp Val Leu Ile
                                105
           100
His Ile Leu Ser Leu Arg His Asp Val Asn Phe Ser Ile Ala Gln Ala
                            120
Ala Ile Glu Ala Phe Gly Asp Ser Ile Asp Val Gln Glu Glu Ile His
                        135
                                            140
Gly Phe Arg Trp Val Glu Glu Arg Asp Leu Ser Gly Phe Val Asp Gly
                                        155
                    150
Thr Glu Asn Pro Ala Gly Glu Glu Thr Arg Arg Glu Val Ala Val Ile
                                    170
Lys Asp Gly Val Asp Ala Gly Gly Ser Tyr Val Phe Val Gln Arg Trp
                                185
Glu His Asn Leu Arg Gln Leu Asn Arg Met Ser Val His Asp Gln Glu
                            200
Met Met Ile Gly Arg Thr Lys Asp Ala Asn Glu Glu Ile Asp Gly Asp
                        215
                                            220
Ala Arg Pro Val Thr Ser His Leu Ser Arg Val Asp Leu Lys Glu Asp
                                        235
                    230
Gly Lys Gly Leu Lys Ile Val Arg Gln Ser Leu Pro Tyr Gly Thr Ala
                245
                                    250
Ser Gly Thr His Gly Leu Tyr Phe Cys Ala Tyr Cys Ala Arg Leu Tyr
            260
                                265
                                                    270
Asn Ile Glu Gln Gln Leu Leu Ser Met Phe Gly Asp Thr Asp Gly Lys
        275
                            280
                                                285
Arg Asp Ala Met Leu Arg Phe Thr Arg Pro Val Thr Gly Gly Tyr Tyr
                        295
                                            300
Phe Ala Pro Ser Val Glu Arg Leu Leu Ala Leu
305
                    310
<210> 10061
<211> 279
<212> PRT
<213> Enterobacter cloacae
<400> 10061
Val Met Phe Ala Gly Ser Thr Arg Arg Val Leu Pro Gly Phe Thr Leu
Ser Leu Gly Thr Ser Leu Leu Phe Val Cys Leu Ile Leu Leu Pro
Leu Ser Ala Leu Val Met Gln Leu Ala Glu Met Ser Trp Ser Gln Tyr
Trp Glu Val Val Thr Asn Pro Gln Val Val Ala Ala Tyr Lys Val Thr
                        55
Leu Leu Ser Ala Phe Val Ala Ser Ile Phe Asn Gly Val Phe Gly Leu
                                        75
Leu Met Ala Trp Ile Leu Thr Arg Tyr Arg Phe Pro Gly Arg Thr Leu
                85
                                    90
Leu Asp Ala Leu Met Asp Leu Pro Phe Ala Leu Pro Thr Ala Val Ala
                                105
Gly Leu Thr Leu Ala Ser Leu Phe Ser Val Asn Gly Phe Tyr Gly Glu
                           120
                                                125
Trp Leu Ala Lys Phe Asp Ile Lys Val Thr Tyr Thr Trp Leu Gly Ile
                       135
                                            140
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Ala Val Ala Met Ala Phe Thr Ser Ile Pro Phe Val Val Arg Thr Val

Gln Pro Val Leu Glu Glu Leu Gly Pro Glu Tyr Glu Glu Ala Ala Glu

Thr Leu Gly Ala Thr Arg Trp Gln Ser Phe Arg Lys Val Val Leu Pro 180 185 190

155

170

Glu Leu Ser Pro Ala Leu Leu Ala Gly Val Ala Leu Ser Phe Thr Arg 200 205 Ser Leu Gly Glu Phe Gly Ala Val Ile Phe Ile Ala Gly Asn Ile Ala 215 220 Trp Lys Thr Glu Val Thr Ser Leu Met Ile Phe Val Arg Leu Gln Glu 230 235 Phe Asp Tyr Pro Ala Ala Ser Ala Ile Ala Ser Val Ile Leu Ala Ala 245 250 Ser Leu Leu Leu Phe Ser Ile Asn Thr Leu Gln Ser Arg Phe Gly 260 265 . Arg Arg Val Val Gly His 275

<210> 10062 <211> 377 <212> PRT

<213> Enterobacter cloacae

<400> 10062 Arg Ile Arg Lys Asn Val Ser Ile Arg Arg Glu Ile Met Ser Ile Glu 10 Ile Ala Asn Ile Lys Lys Ser Phe Gly Arg Thr Gln Val Leu Asn Asp 25 Ile Ser Leu Asp Ile Pro Ser Gly Gln Met Val Ala Leu Leu Gly Pro 40 Ser Gly Ser Gly Lys Thr Thr Leu Leu Arg Ile Ile Ala Gly Leu Glu 55 His Gln Thr Ser Gly His Ile Arg Phe His Gly Thr Asp Val Ser Arg 70 75 80 Leu His Ala Arg Asp Arg Lys Val Gly Phe Val Phe Gln His Tyr Ala 85 90 Leu Phe Arg His Met Thr Val Phe Asp Asn Ile Ala Phe Gly Leu Thr 100 105 Val Leu Pro Arg Arg Glu Arg Pro Asp Ala Ala Ile Lys Ala Lys 120 Val Thr Lys Leu Leu Glu Met Val Gln Leu Ala His Leu Ala Asp Arg 135 Phe Pro Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Val Ala Leu Ala 150 Arg Ala Leu Ala Val Glu Pro Gln Ile Leu Leu Leu Asp Glu Pro Phe 170 165 Gly Ala Leu Asp Ala Gin Val Arg Lys Glu Leu Arg Arg Trp Leu Arg 185 Gln Leu His Glu Glu Leu Gln Phe Thr Ser Val Phe Val Thr His Asp 195 200 Gln Glu Glu Ala Met Glu Val Ala Asp Arg Val Val Met Ser Gln 215 220 Gly Asn Ile Glu Gln Val Asp Glu Pro Glu Gln Leu Trp Arg Glu Pro 230 235 Ala Thr Arg Phe Val Leu Glu Phe Met Gly Glu Val Asn Arg Leu Gln 250 245 Gly Thr Ile Arg Gly Gly Gln Phe His Val Gly Ala His Arg Trp Pro 260 265 Leu Gly Tyr Thr Ser Ala His Gln Gly Pro Val Asp Leu Phe Leu Arg 275 285 280 Pro Trp Glu Val Asp Val Ser Arg Arg Thr Ser Leu Asp Ser Pro Leu 295 300 Pro Val Gln Val Leu Glu Ala Ser Pro Lys Gly His Tyr Thr Gln Leu 310 315 Val Val Gln Pro Leu Gly Trp Tyr Thr Glu Pro Leu Thr Val Val Met 325 330

Arg Asp Asp Glu Pro Pro His Arg Gly Glu Arg Leu Phe Val Gly Leu 340 345 Gln His Ala Arg Ile Tyr His Gly Asn Glu Arg Ile Glu Thr Arg Glu 360 Asp Ile Ala Leu Ala Glu Ser Ala 370 <210> 10063 <211> 291 <212> PRT <213> Enterobacter cloacae <400> 10063 Arg Glu Leu Phe Ala Gly Gly Gly Asp Leu Ser Val Met Glu Met Ile 10 Leu Phe Arg Asp Asn Thr Arg Ala Gln Gln Thr Asp Ile Val Ala Val 20 25 Gln Ser Gln Val Val Tyr Gly Ser Val Gly Asn Ser Ile Ala Val Pro 40 4.5 Asn Ile Arg Thr His Arg Leu Asn Val Thr Ala Val Pro Thr Val Leu 55 Phe Ser Asn Thr Pro His Tyr Asp Thr Phe Tyr Gly Gly Val Ile Pro 75 70 Asp Glu Trp Phe Ser Gly Tyr Leu Lys Ala Leu Glu Glu Arg Glu Ile 90 Leu Arg Glu Leu Lys Ala Val Thr Thr Gly Tyr Met Gly Ser Ala Ser 100 105 Gln Ile Val Leu Leu Ala Gln Trp Leu Lys Ala Ile Lys Val Gln His 120 125 Pro Asp Leu Val Leu Val Asp Pro Val Ile Gly Asp Ile Asp Ser 135 140 Gly Met Tyr Val Lys Pro Asp Ile Pro Glu Ala Tyr Arg Glu His Leu 150 155 Leu Pro Leu Ala Gln Gly Ile Thr Pro Asn Val Tyr Glu Leu Glu Val 170 Leu Ser Gly Lys Pro Cys Arg Thr Pro Glu Ser Ala Ile Ala Ala Ala 180 185 190 Gln Gly Leu Leu Ser Asn Ser Leu Lys Trp Val Ala Ile Thr Ser Ala 200 Pro Val Ala Asp Asp Pro Gln Asn Ile His Val Val Leu Val Ser Glu 215 Gly Gly Val Thr Val Ser Ala His Pro Arg Val Glu Thr Asp Leu Lys 230 Gly Thr Gly Asp Leu Phe Cys Ser Glu Leu Val Ser Gly Ile Val Gly 250 Gly Lys Thr Val Ala Asp Ala Ile Arg Met Ala Gly Asp Arg Val Thr 265 Asp Val Met Ile Tyr Thr Gln Ser Lys Gly Tyr Asp Glu Leu Ile Leu 280 Pro Ala 290 <210> 10064 <211> 94 <212> PRT <213> Enterobacter cloacae <400> 10064 Thr Asn Ser Ser Ile Pro Leu Ser Asp Ser Ile Glu Asn Ala Trp Leu 10

Val Ser Lys Ile Leu Pro Met Val Pro Ser Thr Gly Ala Thr Ile Leu

25 Leu Pro Val Gly Leu Ile Ala Met Pro Ser Pro Thr Ile Phe Ser Ala Asn Thr Thr Ser Gly Thr Ser Ser Met Leu Thr Ile Ser Pro Glu Ser Gly Ala Thr Ile Ser Ile Val Pro Glu Ser Phe Leu Ser Ser Glu Thr 70 Arg Asp Phe Ser Leu Ser Asn Lys Pro Met Ile Phe Ser <210> 10065 <211> 425 <212> PRT <213> Enterobacter cloacae <400> 10065 Thr Thr Gln Met Ala Leu Ser Gln Leu Pro Asp Lys Gly Ser Gly Ala Ala Ser Pro Ala Ala Ser Cys Pro Ala Ala Thr Ile Thr Gly Ile Lys Ile Met Ser Leu Gln Lys Thr Trp Gly Asn Phe His Leu Ser Ala Met 40 Gly Val Val Leu Leu Ser Val Leu Leu Val Gly Cys Asp Asp Ser Val Ala Gln Asn Ala Ala Pro Gln Ala Pro Val Val Ser Ala Ala Asp Val 70 Val Val Lys Ser Ile Ser Gln Trp Asp Ser Phe Asn Gly Arg Ile Glu 90 Ala Val Glu Ser Val Gln Leu Arg Pro Arg Val Ser Gly Tyr Ile Glu 105 Lys Val Asn Tyr Thr Asp Gly Gln Glu Val Lys Lys Gly Glu Val Leu 115 120 Phe Thr Ile Asp Asp Arg Thr Tyr Arg Ala Ala Leu Glu Gln Ala Gln 135 140 Ala Asn Leu Ala Arg Ala Lys Thr Gln Ala Ser Leu Ala Gln Ser Glu 150 155 Ala Asn Arg Thr Asp Lys Leu Ile Asn Thr His Leu Val Ser Arg Glu 170 165 Glu Trp Glu Gln Arg Arg Ser Ala Ala Val Gln Ala Gln Ala Asp Ile 185 180 Arg Ala Ala Gln Ala Ala Val Asp Ala Ala Gln Leu Asn Leu Asp Phe 200 Thr Lys Val Thr Ala Pro Ile Asp Gly Arg Ala Ser Arg Ala Leu Ile 215 220 Thr Ser Gly Asn Leu Val Thr Ala Gly Asp Ser Ala Ser Val Leu Thr 230 235 Thr Leu Val Ser Gln Lys Thr Val Tyr Val Tyr Phe Asp Val Asp Glu 245 250 Ser Thr Tyr Leu His Tyr Gln Lys Leu Ala Arg Ser Gly Gln Gly Ala 265 Ser Ser Asn His Thr Ala Leu Pro Val Glu Ile Gly Leu Thr Gly Glu 280 285 Glu Gly Tyr Pro His Gln Gly Lys Val Asp Phe Leu Asp Asn Gln Leu 295 Thr Pro Gly Thr Gly Thr Ile Arg Met Arg Ala Leu Leu Asp Asn Ser 310 315 Gln Arg Gln Phe Thr Pro Gly Leu Phe Ala Arg Val Arg Leu Pro Gly 325 330 Ser Ala Glu Phe Lys Ala Thr Leu Val Asp Asp Lys Ala Val Leu Thr

340 345 350
Asp Gln Asp Arg Lys Tyr Val Tyr Ile Val Asp Lys Asp Gly Lys Ala

360 365 Gln Arg Arg Asp Ile Thr Pro Gly Arg Leu Ala Asp Gly Leu Arg Ile 375 380 Val Gln Gln Gly Leu Asn Pro Gly Asp Lys Val Ile Val Asp Gly Leu 390 395 Gln Lys Val Phe Met Pro Gly Met Pro Val Asn Ala Lys Thr Val Ala 405 410 Met Thr Ala Ser Ala Ala Leu Asn <210> 10066 <211> 793 <212> PRT <213> Enterobacter cloacae <400> 10066 Val Asn Arg Ile Pro Ser Leu Ile Phe Lys Ile Pro Pro Pro Leu Cys 10 Leu Pro Gly Ile Phe Arg Ala Thr Cys Thr Ser Gly Trp Met Pro Val 20 25 Phe Leu Tyr Pro Leu Glu Arg Lys Gly Cys Lys Arg Ala Ser Met Asn 35 40 Ile His His Ile Leu Lys Gln Asn Lys Asp Arg Trp Trp Ala Leu Pro 55 60 Leu Ile Leu Pro Val Val Leu Leu Pro Val Leu Ser Val Ala Asn Thr 70 Leu Thr Gln Leu Gly Asp Gly Ile Val Ala Leu Tyr Tyr Leu Pro Leu 85 90 Ser Phe Leu Leu Ala Leu Met Leu Phe Phe Gly Leu Glu Ala Leu Pro 100 105 Gly Val Val Val Ser Leu Phe Leu Arg Tyr Tyr Pro Ser Val Gly Leu 120 Phe Glu Thr Val Ala Gly Ile Leu His Phe Ile Val Pro Leu Val Leu 135 Ser Trp Gly Gly Tyr Arg Val Phe Ala Pro Arg Arg Asn Met Thr Ala 150 155 Tyr Gly Asp Ile Arg Leu Met Gly Gln Arg Ile Phe Trp Gln Val Phe 170 Cys Pro Ala Thr Leu Phe Leu Val Leu Phe Gln Phe Ala Val Tyr Leu 185 Gly Ile Tyr Glu Ser Arg Gln Ser Leu Ala Gly Leu Asn Pro Leu Asn 200 Ile Arg Thr Leu Ile Asn Tyr Gln Gly Leu Leu Val Ser Gly Leu Thr 215 220 Gly Val Pro Leu Ser Tyr Leu Leu Ile Arg Leu Ile Arg His Pro Arg 230 235 Tyr Ile Lys Gly Leu Met Ser Gln Leu Arg Ala Gln Ile Asp Lys Lys 245 250 255 Val Thr Ala Val Glu Phe Val Val Trp Phe Leu Ala Leu Gly Gly Leu 265 270 Leu Val Met Leu Leu Pro Met Asn Ala Asn Ser Ser Ile Phe Ser 280 285 Thr Asn Tyr Thr Leu Ser Leu Leu Met Pro Val Met Leu Trp Gly Ala 295 300 Met Arg Phe Gly Tyr Lys Leu Met Ser Leu Ile Trp Thr Pro Val Leu 310 315 Leu Val Ser Ile His Phe Phe Tyr His Tyr Ile Pro Val Gln Glu Gly 325 330 Tyr Gly Ile Gln Leu Ala Ile Thr Ser Ser Tyr Leu Val Phe Ser 345

Phe Val Val Thr Tyr Met Ser Met Leu Ala Thr Arg Gln Arg Ala Ile

```
360
                                                365
Asn Ile Arg Ser Arg Ser Gln Ala Phe Leu Asp Pro Val Val His Met
                        375
                                    380
Pro Asn Leu Arg Ala Leu Ser Arg Glu Leu Ala Ser His Pro Trp Ser
                    390
                                       395
Ala Leu Cys Leu Leu Arg Val Pro Glu Leu Glu Val Leu Gly Arg Asn
                                    410
Tyr Gly Val Met Leu Arg Ile Gln Tyr Lys Gln Gln Leu Ala Gln Trp
            420
                                425
Ile Asn Gly Thr Leu Gln Pro Asn Glu Arg Val Tyr His Leu Thr Gly
        435
                           440
Tyr Asp Met Ala Val Arg Leu Asp Ala Glu Ser His Gln Gln Arg Ile
                        455
Glu Thr Leu Asp Glu His Ile Lys Gln Phe Val Phe Val Trp Asp Gly
                    470
                                        475
Met Pro Val Gln Pro Gln Val Gly Ile Ser Tyr Cys Tyr Val Arg Ser
                485
                                    490
Pro Val Asn His Leu Tyr Leu Val Leu Gly Glu Leu Gly Ile Val Ala
            500
                                505
Asp Leu Ser Leu Ser Thr Asn His Pro Glu Asn Leu Gln Gln Arg Gly
                            520
                                                525
        515
Ala Val His Leu Gln Arg Ser Leu Lys Asp Lys Val Ala Met Met Ser
                        535
                                            540
Arg Leu Gln Ala Ala Leu Glu Gln Asp Ala Phe Thr Leu Leu Val Gln
                    550
                                        555
Pro Val Arg Gly Leu Arg Gly Asp Cys Tyr His Glu Val Leu Leu Arg
                565
                                    570
Met Arg Asp Asp Asn Gly Ala Leu Ile Phe Pro Glu Gln Phe Leu Pro
                                585
            580
Ile Ala Gln Glu Phe Gly Leu Ser Ser Arg Val Asp Leu Trp Val Leu
                            600
        595
Glu Arg Thr Leu Ser Phe Leu Ala Gln His Arg Gln Arg Leu Pro Gly
                        615
                                            620
Gln Arg Phe Ala Ile Asn Leu Ala Pro Ser Thr Val Tyr Arg Ala Gln
                                        635
                    630
Phe Pro Leu Glu Val Ser Arg Leu Leu Ala Lys Tyr Ala Val Glu Ala
                645
                                    650
Trp Gln Leu Ile Phe Glu Val Thr Glu Ser Ser Ala Phe Gly His Ala
                                665
                                                    670
Asp Leu Ala Ala Ser Thr Leu Arg Lys Leu Gln Lys Met Gly Ile Arg
                            680
Ile Ala Ile Asp Asp Phe Gly Thr Gly Tyr Ala Ser Tyr Ala Arg Leu
                        695
                                            700
Lys Ser Val Asp Ala Asp Ile Leu Lys Ile Asp Gly Gly Phe Ile Arg
                    710
                                        715
Asn Ile Val Ser Asn Ser Leu Asp Tyr Gln Ile Val Ala Ser Ile Cys
                                    730
His Leu Ala Arg Met Lys Lys Met Leu Val Val Ala Glu Tyr Val Glu
                                745
Thr Glu Glu Ile Arg Ser Ala Val His Ala Leu Gly Ile Asp Tyr Val
                            760
Gln Gly Tyr Leu Ile Gly Leu Pro Ala Glu Leu Asp Thr Leu Leu Asp
                        775
Thr Glu Pro Ser Gln Glu Ser Ala
<210> 10067
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<sup>&</sup>lt;211> 478

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<400> 10067 Arg Met Ser Gly Phe Lys Ala Gly Phe Leu Trp Gly Gly Ala Val Ala Ala His Gln Leu Glu Gly Gly Trp Lys Glu Gly Gly Lys Gly Val Ser 25 Val Ala Asp Val Met Thr Ala Gly Ala His Gly Val Pro Arg Glu Ile Thr Asn Gly Val Met Glu Gly Lys Asn Tyr Pro Asn His Glu Ala Ile 55 Asp Phe Tyr His Arg Tyr Lys Glu Asp Ile Lys Leu Phe Ala Glu Met 70 75 Gly Phe Lys Cys Phe Arg Thr Ser Ile Ala Trp Thr Arg Ile Phe Pro 90 85 Lys Gly Asp Glu Leu Glu Pro Asn Glu Ala Gly Leu Gln Phe Tyr Asp 100 105 Asp Leu Phe Asp Glu Cys Leu Lys His Gly Ile Glu Pro Val Ile Thr 120 Leu Ser His Phe Glu Met Pro Phe His Leu Val Thr Glu Tyr Gly Gly 135 140 Trp Arg Asn Arg Lys Leu Ile Asp Phe Phe Val Arg Phe Ala Lys Val 150 155 Val Phe Glu Arg Tyr Gln His Lys Val Lys Tyr Trp Met Thr Phe Asn 165 170 Glu Ile Asn Asn Gln Ala Asn Phe His Glu Asp Phe Ala Pro Phe Thr 185 Asn Ser Gly Leu Lys Tyr Ala Pro Gly Glu Asp Arg Glu Pro Val Met 195 200 Phe Gln Ala Ala His Tyr Glu Leu Val Ala Ser Ala Leu Ala Val Lys 215 Ala Gly Arg Glu Ile Asn Pro Ser Leu Gln Ile Gly Cys Met Ile Ala 230 235 Met Cys Pro Ile Tyr Pro Leu Thr Cys Ala Pro Asp Asp Met Met Met 250 245 Ala Met Asn Ala Met His Arg Arg Tyr Trp Phe Thr Asp Val His Val 265 Arg Gly Lys Tyr Pro Gln His Leu Leu Asn Tyr Phe Glu Arg Arg Gly 275 280 Phe Ala Leu Asp Ile Thr Glu Glu Asp Lys Val Ala Leu Thr Gln Gly 295 300 Cys Val Asp Tyr Ile Gly Phe Ser Tyr Tyr Met Ser Phe Ala Thr Lys 。305 310 315 Ala Thr Ala Asp Asn Pro Thr Leu Asp Tyr Asp Glu Ser Lys Ser Leu 330 325 Val Ser Asn Pro Tyr Val Gln Lys Ser Asp Trp Gly Trp Gln Ile Asp 340 345 Pro Val Gly Leu Arg Tyr Ser Leu Asn Trp Phe Trp Asp His Tyr Gln 360 365 Leu Pro Leu Phe Ile Val Glu Asn Gly Phe Gly Ala Ile Asp Val Gln 375 380 Glu Ser Asp Gly Thr Val Asn Asp Gln Tyr Arg Ile Asp Tyr Leu Ser 390 395 Ala His Ile Arg Glu Met Lys Lys Ala Val Val Glu Asp Gly Val Asp 405 410 Leu Met Gly Tyr Thr Pro Trp Gly Cys Ile Asp Leu Val Ser Ala Gly 420 425 Thr Gly Glu Met Lys Lys Arg Tyr Gly Phe Ile Phe Val Asp Lys Asp 440 Asn Glu Gly Asn Gly Thr Leu Asn Arg Ser Lys Lys Ser Phe Asp 455 Trp Tyr Lys Gln Val Ile Ala Ser Asn Gly Glu Gln Leu 470

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<210> 10068
<211> 297
<212> PRT
<213> Enterobacter cloacae
<400> 10068
Asn Arg Ser Gln Ser Ile Arg Cys Ser Asp Ile Asn Leu Ile Arg Leu
Val Ala Glu Arg Asp Ala Met Glu Ile Lys Leu His Ala Asn Ala Thr
                                25
Thr Thr Pro Arg Ile Arg Arg Tyr Leu Gln Gln Ser Asp Lys Ser Asp
                            40
                                                 45
Arg Glu Leu Ala Val Glu Leu Gly Ile Ser Val Thr Thr Val Arg Arg
                        55
Trp Arg Asn Arg Asp Gln Val Ser Asp Asn His Thr Thr Pro Lys Val
                    70
                                        75
Ile His Lys Ala Leu Arg Gln Glu Gln Ala Ala Leu Ile Asn Ala Leu
                                    90
Arg Asp Ile Thr Gly Ala Pro Leu Asp Glu Leu Leu Leu Val Asn
                                105
            100
Asp Gly Leu Gly Ile Ala Val Ser Arg Ala Thr Leu Asn Arg Tyr Leu
        115
                            120
                                                 125
Lys Pro Ala Ser Val Arg Gln Lys Gly Ala Ser Leu Gln Gly Lys Lys
                        135
                                             140
Ala Leu Lys Ala Gly Ile Met Pro Gln Lys Leu Leu His His Gln
                    150
                                        155
Pro Leu Ser Leu His Met Asp Asp Gly Glu Gln His Leu Leu Trp
                                    170
                165
Ala Arg Glu Pro Val Ser Gly Trp Cys Tyr Ala Arg Leu Tyr Ala Gly
            180
                                185
                                                     190
Val Ser Pro Gln Leu Leu Thr Arg Trp Thr Asn Glu Val Leu Ala Ala
                            200
                                                 205
Cys Pro Ala Asp Ile Gln Ser Val Glu Thr Phe Gly Leu Ala Val Asn
                        215
                                            220
Leu Pro Glu His Asn Val Thr Val Lys Val His Ser Gln Tyr Tyr Leu
                    230
                                        235
Ala Leu Gln Val Thr Val Pro Leu Arg Glu Ile Ile Pro Arg Val Asn
                245
                                    250
Ser Glu Pro Ala Gly Ala Leu Leu Ile Gln Leu Cys Glu Phe Tyr Asn
                                265
Arg Gly Lys Ala Gln Lys Lys Leu Gly Glu Arg Thr Pro Gln Ala Phe
                            280
Leu Lys Ala Leu Arg Arg Asn Asp
    290
<210> 10069
<211> 302
<212> PRT
<213> Enterobacter cloacae
<400> 10069
Gly Ser Cys Ser His Arg Gly Trp Leu Met Phe Thr Gly Ser Ile Val
                                    10
Ala Leu Val Thr Pro Met Asp Glu Lys Gly Asn Val Cys Arg Ser Ser
                                25
            20
Met Lys Lys Leu Ile Asp Tyr His Val Ala Asn Gly Thr Ser Ala Ile
                            40
                                                 4.5
Val Ser Val Gly Thr Thr Gly Glu Ser Ala Thr Leu Ser His Glu Glu
```

His Gly Asp Val Val Met Leu Thr Leu Glu Leu Ala Asp Gly Arg Ile

```
70
                                        75
Pro Val Ile Ala Gly Thr Gly Ala Asn Ala Thr Ala Glu Ala Ile Ser
               85
                                   90
Leu Thr Gln Arg Phe Asn Asp Ser Gly Ile Val Gly Cys Leu Thr Val
                                105
Thr Pro Tyr Tyr Asn Arg Pro Thr Gln Glu Gly Leu Phe Gln His Phe
                            120
Lys Ala Ile Ala Glu His Thr Asp Leu Pro Gln Ile Leu Tyr Asn Val
                       135
                                            140
Pro Ser Arg Thr Gly Cys Asp Met Leu Pro Glu Thr Val Gly Arg Leu
                    150
                                        155
Ser Lys Val Lys Asn Ile Ile Gly Ile Lys Glu Ala Thr Gly Asn Leu
                                    170
                165
Ser Arg Val His Gln Ile Lys Glu Leu Val Ser Asp Asp Phe Ile Leu
                                185
            180
Leu Ser Gly Asp Asp Ala Thr Ala Leu Asp Phe Met Gln Leu Gly Gly
                            200
Asn Gly Val Ile Ser Val Thr Ala Asn Val Ala Ala Arg Asp Met Ala
                                            220
   210
                        215
Asp Met Cys Lys Leu Ala Ala Ala Gly His Phe Asp Glu Ala Arg Val
                    230
                                        235
Ile Asn Gln Arg Leu Met Pro Leu His Asn Lys Leu Phe Val Glu Pro
                245
                                    250
Asn Pro Ile Pro Val Lys Trp Ala Cys Lys Glu Leu Gly Leu Val Ala
                                265
                                                    270
Thr Asp Thr Leu Arg Leu Pro Met Thr Pro Ile Thr Asp His Gly Arg
                            280
Glu Ile Val Ala Gly Ala Leu Lys His Ala Gly Leu Leu
<210> 10070
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<211> 97

<212> PRT <213> Enterobacter cloacae

<400> 10070

Ser Trp Arg Leu Gly Leu Ile Arg Thr Pro Cys Arg Gly Phe Arg Arg Arg Ala Ser Thr Pro Thr Thr Gly Gly Ala Ser Arg Pro Pro Trp Arg 25 Ala Val Ile Ala Thr Arg Pro Arg Ile Arg Arg Phe Leu Leu Ala Val 40 Met Arg Tyr Ala Val Arg Ile Trp Trp Ser Pro Arg Trp Arg Lys Gly 55 Ala Met Pro Arg Arg Gly Ser Trp Thr Gly Leu Ala Cys Arg Arg Ala 70 75 Thr Cys Ile Asn Ala Asp Gly Arg Gln Ser Gly Leu His Gly Val Val

<210> 10071

<211> 207

<212> PRT

<213> Enterobacter cloacae

<400> 10071

Thr Asp Ser Phe Cys Arg Gly Ala Arg Met Ser Pro Asn Ile Ser Val 10 Ile Lys Asp Lys Ile Leu Ser Glu Asn Tyr Phe Val Leu Arg Asn Ile 20

```
Thr Tyr Asp Leu Thr Arg Lys Asn Gly Asp Val Ile Arg His Lys Arg
                            40
Glu Val Tyr Asp Arg Gly Asn Gly Ala Thr Ile Leu Leu Tyr Asn Arg
                        55
                                            60
Glu Lys Gln Ser Val Val Leu Ile Arg Gln Phe Arg Ile Ala Thr Trp
                    70
                                        75
Val Asn Gly Asn Ala Asp Gly Arg Leu Ile Glu Thr Cys Ala Gly Leu
                                    90
Leu Asp Asp Glu Pro Glu Val Cys Ile Arg Lys Glu Ala Ile Glu
                                105
Glu Thr Gly Phe Glu Val Gly Thr Val Gln Lys Val Phe Glu Leu Phe
                            120
Met Ser Pro Gly Gly Val Thr Glu Leu Ile His Phe Phe Ile Ala Glu
                        135
                                            140
Tyr Thr Asp Ala Gln Arg Thr His Arg Gly Gly Val Asp Asp Glu
                    150
                                        155
Asp Ile Glu Val Leu Glu Met Pro Phe Ala Lys Ala Val Asp Met Val
                                    170
                165
Lys Arg Gly Glu Ile Arg Asp Gly Lys Ala Val Ile Leu Leu Gln Tyr
                                185
Leu Gln Thr Ser Gly Leu Met Asn Ala Ala Ala Glu Ala Arg
                            200
<210> 10072
<211> 152
<212> PRT
<213> Enterobacter cloacae
<400> 10072
Ser Lys Met Lys Ser Thr Glu Phe His Pro Gly Asp Tyr Asp Val His
                                    10
Gly Arg Leu Arg Leu Pro Phe Leu Phe Trp Cys Val Leu Leu Gln
            20
Ala Arg Thr Trp Val Leu Phe Val Met Ala Gly Ala Ser Arg Gly Gln
Gly Asp Thr Leu Leu Asn Leu Phe Tyr Pro Asp His Asp Ala Phe Trp
Leu Gly Leu Leu Pro Gly Val Pro Ala Val Leu Ala Phe Leu Cys Ser
                    70
Gly Arg Arg Gln Phe Leu Pro Arg Phe Trp Arg Ala Leu Arg Trp Leu
                                    90
Leu Ile Leu Ala Gln Val Val Leu Leu Val Trp Gln Pro Val Leu Trp
Leu Tyr Gly Glu Pro Leu Ser Gly Ile Gly Ile Ala Leu Val Val Ala
                            120
Asp Ile Val Ala Leu Leu Trp Leu Val Thr Asn Pro Arg Leu Arg Ala
                        135
Cys Phe Met Gln Glu Ser Asp
<210> 10073
<211> 213
<212> PRT
<213> Enterobacter cloacae
<400> 10073
Asn Gly Thr Phe Cys Arg Tyr Cys Thr Pro Thr Ser Val Asp Leu Leu
                                    10
Arg Lys Asp Val Ser Met Lys Ser Leu Arg Leu Leu Cys Ala Leu
                                25
```

Pro Leu Ala Leu Thr Gly Cys Ser Thr Leu Ser Ser Ile Asn Trp Ser

```
40
Ala Ala Tyr Pro Trp Asn Trp Phe Gly Ser Ser Thr Glu Val Thr Glu
                        55
                                            60
Gln Gly Val Gly Lys Ile Thr Ala Ser Thr Ala Leu Asp Gln Asp Ala
                    70
                                        75
Ile Gln Asp Ala Ile Gly Ser Asp Tyr Arg Leu Arg Ser Gly Met Lys
                                    90
                85
Thr Glu Asn Gly Asn Ile Val Arg Tyr Phe Glu Ala Leu Lys Asp Asp
            100
                                105
Lys Val Ala Met Val Ile Asn Gly Asp Lys Gly Thr Val Asn Arg Ile
                            120
Ala Val Met Asp Glu Glu Ile Pro Thr Ser Gly Gly Val Lys Val Gly
                        135
                                            140
Thr Pro Phe Gly Glu Leu Tyr Gln Lys Ala Phe Gly His Cys Ala Ser
                    150
                                        155
Val Pro Ser Glu Glu Ser Val Ala Val Glu Cys Lys Ala Asp Gly Ser
                                    170
                165
Gln His Ile Ser Tyr Val Phe Ser Gly Thr Trp Asn Gly Pro Glu Gly
            180
                                185
Leu Met Pro Ser Asp Asp Thr Leu Lys Lys Trp Lys Val Ser Lys Ile
                            200
Ile Trp Lys Gln
   210
<210> 10074
<211> 341
<212> PRT
<213> Enterobacter cloacae
<400> 10074
Gly Cys Ala Met Ala Val Thr Val Leu Lys Lys Gly Ser Leu Ala Leu
                                    10
Ala Gly Leu Leu Val Ala Gln Ala Gln Ala Thr Glu Leu Leu Asn
Ser Ser Tyr Asp Val Ser Arg Glu Leu Phe Ala Ala Leu Asn Pro Ala
                            40
Phe Glu Gln Gln Trp Ala Lys Glu Asn Asn Gly Asp Lys Leu Thr Ile
                        55
                                            60
Lys Gln Ser His Ala Gly Ser Ser Lys Gln Ala Leu Ala Ile Leu Gln
                    70
                                        75
Gly Leu Lys Ala Asp Val Val Thr Tyr Asn Gln Val Thr Asp Val Gln
                                    90
Ile Leu His Asp Lys Gly Lys Leu Ile Pro Ala Asn Trp Gln Ser Arg
                                105
Leu Pro Asn Asn Ser Ser Pro Phe Tyr Ser Thr Met Gly Phe Leu Val
                            120
                                                125
Arg Lys Gly Asn Pro Lys Asn Ile His Asp Trp Asn Asp Leu Val Arg
                        135
                                            140
Ser Asp Val Lys Leu Ile Phe Pro Asn Pro Lys Thr Ser Gly Asn Ala
                    150
                                        155
Arg Tyr Thr Tyr Leu Ala Ala Trp Gly Ala Ala Asp Lys Ala Asp Gly
                165
                                    170
Asn Asp Lys Ala Lys Thr Glu Gln Phe Met Thr Gln Phe Leu Lys Asn
            180
                                185
                                                    190
Val Glu Val Phe Asp Thr Gly Gly Arg Gly Ala Thr Thr Thr Phe Ala
                            200
                                                205
Glu Arg Gly Leu Gly Asp Val Leu Ile Ser Phe Glu Ser Glu Val Asn
                        215
                                            220
Asn Ile Arg Lys Gln Tyr Glu Ala Gln Gly Phe Glu Val Val Ile Pro
```

230

Lys Thr Asn Ile Leu Ala Glu Phe Pro Val Ala Trp Val Asp Lys Asn

305

5571 245 250 Val Lys Ala Asn Gly Thr Glu Lys Ala Ala Lys Ala Tyr Leu Asn Tyr 260 265 Leu Tyr Ser Pro Gln Ala Gln Thr Val Ile Thr Asp Tyr Tyr Tyr Arg 280 285 Val Asn Asn Pro Asp Val Met Ser Lys Leu Lys Asp Lys Phe Pro Gln 295 300 Thr Glu Leu Phe Arg Val Glu Asp His Phe Gly Ala Trp Pro Glu Val 310 315 Met Lys Thr His Phe Ala Ser Gly Gly Glu Leu Asp Lys Leu Leu Ala 325 Ala Gly Arg Lys 340 <210> 10075 <211> 307 <212> PRT <213> Enterobacter cloacae <400> 10075 Val Lys Ile Val Asn Thr Leu Glu His Thr Ile Gly Asn Thr Pro Leu Val Lys Leu Gln Arg Met Gly Cys Asp Asn Gly Ser Glu Ile Trp Val 25 Lys Leu Glu Gly Asn Asn Pro Ala Gly Ser Val Lys Asp Arg Ala Ala 40 Leu Ser Met Ile Val Gln Ala Glu Lys Arg Gly Glu Ile Lys Pro Gly 55 Asp Val Leu Ile Glu Ala Thr Ser Gly Asn Thr Gly Ile Ala Leu Ala 70 Met Ile Ala Ala Leu Lys Gly Tyr Arg Met Lys Leu Leu Met Pro Asp 90 Asn Met Ser Gln Glu Arg Arg Ala Ala Met Arg Ala Tyr Gly Ala Glu 105 Leu Ile Leu Val Ser Lys Glu Gln Gly Met Glu Gly Ala Arg Asp Leu 120 Ala Leu Ala Met Ala Glu Arg Gly Glu Gly Lys Leu Leu Asp Gln Phe 135 Asn Asn Pro Asp Asn Pro Tyr Ala His Tyr Thr Thr Gly Pro Glu 150 155

Ile Trp Gln Gln Thr Ala Gly Arg Ile Thr His Phe Val Ser Ser Met 165 170 Gly Thr Thr Gly Thr Ile Thr Gly Val Ser Arg Phe Leu Arg Glu Gln 180 185 Asp Lys Pro Val Thr Ile Val Gly Leu Gln Pro Glu Glu Gly Ser Ser 195 200 205 Ile Pro Gly Ile Arg Arg Trp Pro Ala Glu Tyr Met Pro Gly Ile Phe 215 220 Asn Ala Gln Leu Val Asp Gln Val Leu Asp Ile His Gln Arg Glu Ala 230 235 Glu Asn Thr Met Arg Glu Leu Ala Val Arg Glu Gly Ile Phe Cys Gly 245 250 Val Ser Ser Gly Gly Ala Val Ala Gly Ala Ile Arg Val Ala Glu Ser 265 260 Thr Pro Gly Ala Val Val Ala Ile Ile Cys Asp Arg Gly Asp Arg 280 285 Tyr Leu Ser Thr Gly Val Phe Gly Glu Glu Ser Tyr Ser Gln Gly Ala 290 295 Gly Ile

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<210> 10076
<211> 241
<212> PRT
<213> Enterobacter cloacae
<400> 10076
Leu Met Tyr Val Lys Gln Asp Gly Tyr Gly Ala Ile Arg Lys Lys Arg
Tyr Asn Pro Ala Ile Phe Leu Arg Met Pro Pro Gln Arg Arg Lys Arg
                                25
Met Lys Ile Val Glu Val Lys His Pro Leu Val Lys His Lys Leu Gly
                            40
Leu Met Arg Glu His Asp Ile Ser Thr Lys Arg Phe Arg Glu Leu Ala
                        55
Ser Glu Val Gly Ser Leu Leu Thr Tyr Glu Ala Thr Ser Asp Leu Glu
                    70
                                        75
Thr Glu Lys Val Thr Ile Glu Gly Trp Asn Gly Pro Val Gln Val Glu
                                    90
                85
Gln Ile Lys Gly Lys Lys Ile Thr Val Val Pro Ile Leu Arg Ala Gly
            100
                                105
                                                    110
Leu Gly Met Met Glu Gly Val Leu Glu His Val Pro Ser Ala Arg Ile
                            120
Ser Val Val Gly Ile Tyr Arg Asn Glu Glu Thr Leu Glu Pro Val Pro
                        135
                                            140
Tyr Phe Gln Lys Leu Val Ser Asn Ile Asp Glu Arg Met Ala Leu Val
                    150
                        · ·
                                        155
Val Asp Pro Met Leu Ala Thr Gly Gly Ser Met Ile Ala Thr Ile Asp
                                    170
Leu Leu Lys Lys Ala Gly Cys Ser Ser Ile Lys Val Leu Val Leu Val
                                185
            180
Ala Ala Pro Glu Gly Ile Ala Ala Leu Glu Lys Ala His Pro Asp Val
                            200
Glu Leu Tyr Thr Ala Ser Val Asp Gln Gly Leu Asn Glu His Gly Tyr
Ile Ile Pro Gly Leu Gly Asp Ala Gly Asp Lys Ile Phe Gly Thr Lys
                    230
                                        235
<210> 10077
<211> 371
<212> PRT
<213> Enterobacter cloacae
<400> 10077
Ile Gln Phe Thr Val Ser Leu Pro Pro Phe Asp Ser Gly Lys Gly Cys
                                    10
Met Leu Glu Met Leu Met Gln Trp Tyr Arg Arg Phe Ser Asp Pro
                                25
Glu Ala Ile Ala Leu Leu Val Ile Leu Val Ala Gly Phe Gly Ile Leu
                            40
Phe Phe Phe Ser Gly Leu Leu Ala Pro Leu Leu Val Ala Ile Val Leu
                        55
Ala Tyr Leu Leu Glu Trp Pro Thr Ala Arg Leu Glu His Ile Gly Cys
Ser Arg Arg Trp Ala Thr Ser Ile Val Leu Val Leu Phe Val Gly Ile
                                    90
```

Leu Leu Met Ser Phe Val Val Met Pro Ile Ala Trp Gln Gln Gly
100 105 110

Ile Tyr Leu Ile Arg Asp Met Pro Gly Met Leu Asn Lys Leu Ser Asp

Phe Ala Ala Thr Leu Pro Arg Arg Tyr Pro Ala Leu Met Asp Ala Gly

```
135
                                            140
Ile Ile Asp Ala Met Ala Glu Asn Met Arg Ala Arg Ile Met Thr Met
                    150
                                        155
Gly Asp Ser Val Val Lys Tyr Ser Leu Ala Ser Leu Val Gly Leu Leu
                165
                                    170
Thr Leu Ala Val Tyr Leu Val Leu Val Pro Leu Met Val Phe Phe Leu
                                185
Val Lys Asp Lys Glu Gln Met Leu Asn Ala Val Arg Arg Val Leu Pro
                            200
Arg Asn Arg Gly Leu Ala Gly Gln Val Trp Gln Glu Met Asn Gln Gln
                        215
                                             220
Ile Thr Asn Tyr Ile Arg Gly Lys Val Leu Glu Met Ile Val Val Gly
                    230
                                        235
Val Ala Thr Trp Ile Gly Phe Val Ile Phe Gly Leu Asn Tyr Ser Leu
                                    250
                245
Leu Leu Ala Val Leu Val Gly Phe Ser Val Leu Ile Pro Tyr Ile Gly
            260
                                265
                                                     270
Ala Phe Val Val Thr Ile Pro Val Val Gly Val Ala Leu Phe Gln Phe
        275
                            280
Gly Leu Gly Thr Glu Phe Trp Ser Cys Phe Ala Val Tyr Leu Ile Ile
   290
                        295
                                             300
Gln Gly Leu Asp Gly Asn Leu Leu Val Pro Val Leu Phe Ser Glu Ala
                    310
                                        315
Val Asn Leu His Pro Leu Val Ile Ile Leu Ser Val Val Ile Phe Gly
                325
                                    330
Gly Leu Trp Gly Phe Trp Gly Val Phe Phe Ala Ile Pro Leu Ala Thr
            340
                                345
Leu Ile Lys Ala Val Val His Ala Trp Pro Asp Val Pro Ala Val Glu
                            360
Asp Lys
   370
<210> 10078
<211> 348
<212> PRT
<213> Enterobacter cloacae
<400> 10078
Gly Asp Leu Met Ala Tyr Ser Val Gln Lys Ser Arg Leu Ala Lys Val
                                    10
Ala Gly Val Ser Leu Val Met Leu Leu Ala Ala Cys Ser Ser Asp Ser
Arg Tyr Lys Arg Gln Val Ser Gly Asp Glu Ser Tyr Leu Asp Ala Pro
Pro Leu Ala Glu Leu His Ala Pro Ala Gly Met Ile Leu Pro Ile Gln
                        55
Asn Gly Asp Tyr Asn Ile Pro Val Thr Asn Gly Ser Gly Leu Val Gly
                    70
                                        75
Lys Ala Leu Asp Ile Arg Pro Pro Ala Gln Pro Leu Ala Leu Val Ser
                85
                                    90
Gly Ala Arg Thr Gln Phe Thr Gly Asp Thr Ala Ser Leu Leu Val Glu
           100
                                105
Ser Ala Arg Gly Thr Thr Leu Trp Pro Gln Val Val Ser Val Ile Gln
                            120
                                                125
Ser Lys Asn Tyr Thr Ile Asp Lys Arg Asp Asp Ala Ser Gln Ala Leu
                        135
                                            140
Thr Thr Asp Trp Ile Glu Trp Asn Arg Leu Asp Glu Asp Gln Gln Tyr
                    150
                                        155
Arg Gly Arg Tyr Gln Val Ser Val Lys Pro Gln Gly Tyr Gln Gln Ala
```

```
Val Thr Val Lys Leu Leu Asn Leu Asp Gln Ala Gly Lys Pro Val Ala
            180
                                185
Asp Pro Ser Ala Met Gln Arg Tyr Ser Thr Glu Met Leu Asn Val Ile
                            200
                                                 205
Ala Ala Gly Leu Asp Lys Asn Ala Thr Asp Ala Ala Asn Ala Ala Gln
                        215
Asn Arg Asn Gly Ser Thr Phe Asp Val Gln Ser Gly Ala Asp Asp Thr
                    230
                                         235
Gly Leu Pro Met Leu Val Val Arg Ala Pro Phe Asn Gln Thr Trp Gln
                245
                                     250
Arg Leu Pro Ala Thr Leu Glu Lys Val Gly Met Lys Val Thr Asp Ser
                                265
Thr Arg Ser Thr Gly Ser Ile Thr Ala Thr Tyr Lys Pro Leu Ser Asp
        275
                            280
                                                 285
Ser Ala Trp Gln Glu Leu Gly Ala Ser Asp Pro Gln Leu Pro Ser Gly
                        295
                                             300
Asp Tyr Lys Ile Gln Val Gly Asp Leu Asp Asn Arg Ser Ser Leu Gln
                    310
                                        315
Phe Ile Asp Pro Lys Gly His Thr Leu Thr Gln Ala Gln Asn Asp Ala
                325
                                    330
Leu Val Ala Ala Phe Gln Ala Ala Phe Ser Lys
            340
                                 345
<210> 10079
<211> 656
<212> PRT
<213> Enterobacter cloacae
<400> 10079
Tyr Leu Arg Gln Ser Tyr Val Met Leu Gly Phe Glu Gln Leu Val Asn
                                    10
Gln Leu Gln Arg Thr Gly His Arg Arg Leu Val Val Leu Ser Gly Asp
            20
                                25
Glu Ala Trp Thr Leu Ser Gln Val Thr His Leu Arg Asp Thr Leu Pro
        35
                            40
Gly Asp Trp Leu Trp Leu Glu Glu Asn Pro Ser Lys Ala Ile Ser Gly
                        55
Leu Leu Gly Arg Glu Tyr Leu His Ala Val Phe Asp Ala Arg Asp Gly
                    70
Phe Asp Val Ser Ala Phe Ala Ala Leu Ser Gly Thr Leu Arg Ala Gly
                                     90
Ser Leu Leu Val Leu Leu Val Pro Pro Phe Ser Val Trp Ala Asp Arg
                                105
Pro Asp Arg Asp Ser Leu Arg Trp Ser Asp Ser Ala Glu Pro Ile Ala
                            120
                                                 125
Thr Pro His Phe Val His His Phe Cys Arg Met Leu Ala Ala Asp Ser
                        135
                                            140
Asp Ala Ile Val Trp His Gln His Arg Pro Leu Cys Leu Pro Val Ala
                    150
                                        155
Pro Asp Leu Pro Ala Trp Gln Pro Ala Ser Gly Glu Pro Gln Arg Glu
                                    170
                165
Gln Ala Glu Ile Leu Asp Ala Leu Leu Thr Met Ser Ala Gly Val Ala
                                185
                                                     190
Ala Val Thr Ala Pro Arg Gly Arg Gly Lys Ser Ala Leu Ala Gly Met
                            200
                                                205
Leu Leu Ser Gly Ile Gln Gly Ser Ala Val Val Thr Ala Pro Ala Lys
                        215
                                            220
Gly Ala Thr Asp Val Ile Ala Arg Phe Ala Gly Glu Arg Phe His Phe
                    230
                                        235
Met Ala Pro Asp Ala Leu Leu Ala Ser Thr Thr Glu Ala Asp Trp Leu
                                    250
```

Ile Val Asp Glu Ala Ala Ala Ile Pro Gly Pro Leu Leu Glu Lys Leu 265 260 Ala Ser Arg Phe Pro Arg Val Leu Leu Thr Thr Thr Val Gln Gly Tyr 280 Glu Gly Thr Gly Arg Gly Phe Leu Leu Lys Phe Cys Ala Arg Phe Ser 295 300 Gly Leu Arg Arg Tyr Thr Leu Ser Thr Pro Val Arg Trp Ala Thr Gly 310 315 Cys Pro Leu Glu Arg Ile Val Ala Asn Ala Leu Leu Phe Asp Asp Ala 325 330 Leu Ile Asp Arg Lys Pro Ala Gly Glu Val Arg Leu Thr Ser Leu Glu 340 345 Pro Gly Ile Trp Glu Ser Asp Pro Ala Arg Gly Ala Gly Val Tyr Glu 360 355 Leu Leu Cys Ala Ala His Tyr Arg Thr Ser Pro Leu Asp Leu Arg Arg 370 375 380 Met Met Asp Ala Pro Gly Gln His Phe Ala Val Ala Gln Ala Gly Ala 390 395 Glu Ile Ala Gly Ala Leu Trp Leu Val Glu Glu Gly Leu Pro Pro 405 410 Glu Leu Ser Arg Ala Val Trp Ala Gly Phe Arg Arg Pro Arg Gly Asn 420 425 430 Leu Val Ala Gln Ser Leu Ala Ala His Gly Gly Ser Pro Leu Ala Ala 440 Thr Leu Lys Gly Arg Arg Val Ser Arg Ile Ala Val His Pro His Arg 455 Gln Arg Glu Gly Ile Gly Gln Arg Leu Ile Arg Ser Ala Ser Gly Glu 470 475 Asp Tyr Leu Ser Val Ser Phe Gly Tyr Thr Asp Glu Leu Trp Arg Phe 490 Trp Arg Gln Cys Gly Phe Val Leu Val Arg Met Gly Ser His Arg Glu 500 505 Ala Ser Ser Gly Cys Tyr Thr Ala Met Ala Leu Leu Pro Leu Ser Glu 520 Ala Gly His Gln Leu Cys Glu Gln Ala His Gln Arg Leu Cys Arg Asp 535 Met Arg Val Leu Ser Ala Trp Asn Gly Glu Lys Ile Pro Val Thr Asp 550 555 Ala Trp Glu Ala Thr Leu Asn Ser Asp Asp Trp Leu Glu Leu Ala Gly 565 570 Phe Ala Phe Ala His Arg Ala Phe Ser Thr Ser Val Ala Ala Leu Thr 585 Arg Leu Val Leu Ala Val Asp Ile Pro Leu Pro Ala Leu Arg Gly Lys 595 600 Met Glu Gly Asn Thr His Asp Phe Gly Arg Lys Ala Leu Leu Ala Lys 615 620 Leu Arg Glu Glu Thr Ala His Ala Leu Glu Arg Leu Asp Tyr Ser Arg 630 635 Ser Gln Gln Leu Lys Ala Asp Ile Leu Gln Trp Gln Phe Phe Gln 645 <210> 10080

<211> 378

<212> PRT

<213> Enterobacter cloacae

<400> 10080

Ile Tyr Pro Ile Asn Pro Ile Glu Pro Ala Arg Pro Gly His Glu Asp 1 5 10 15 Thr Pro Gln Ile Asp Leu Phe Val Ser Gly Ala Val Pro Phe Met Arg 20 25 30

```
Tyr Cys Val Phe Leu Leu Phe Phe Ile Cys Val Leu Pro Ala Pro Arg
                            40
Val Trp Ala Ala Pro Ala Gln Gln Ser Phe Ser Asp Trp Gln Val Thr
                        55
                                            60
Cys Asn Asn Gln Asn Phe Cys Val Ala Arg Asn Thr Gly Glu His Arg
                    70
                                        75
Gly Leu Val Met Ser Leu Ser Arg Ser Ala Gly Ala Lys Thr Asp Ala
                85
                                    90
Ser Leu Arg Ile Asp Leu Gly Gly Leu Ser Ala Pro Pro Val Lys Glu
                                105
Pro Asp Ile Ala Pro Arg Leu Leu Asp Asn Val Pro Leu Lys Leu
                            120
Thr Ser Gln His Trp Gln Leu Thr Pro Trp His Leu Lys Thr Asp Asp
                        135
                                            140
Thr Gly Thr Ile Thr Thr Phe Leu Lys Thr Ile Gln Glu Gly Gln Ala
                    150
                                        155
Leu Thr Leu Arg Gly Gly Lys Gln Thr Ile Ser Leu Ala Gly Leu Lys
                165
                                    170
Ala Ala Leu Leu Phe Ile Asp Ala Gln Gln Lys Arg Val Gly Ser Glu
            180
                                185
                                                    190
Thr Ala Trp Ile Lys Lys Gly Asp Ser Pro Pro Leu Ser Val Pro Pro
                            200
                                                205
        195
Ala Pro Ala Leu Lys Lys Val Ala Val Val Asn Pro Thr Pro Thr Pro
                        215
                                            220
Leu Thr His Asn Glu Leu Asn Asp Leu Leu Asp Tyr Gly Asn Trp Arg
                    230
                                        235
Met Asn His Ser Gln Cys Ser Leu Asp Pro Asn Arg Arg Glu Val Arg
                245
                                    ,250
Val Thr Ala Leu Thr Asp Asp Lys Ala Leu Met Ile Ile Ser Cys Glu
            260
                                265
Ala Gly Ala Tyr Asn Thr Val Asp Leu Ala Trp Leu Val Ser Arg Lys
                            280
Lys Pro Phe Ala Ala Arg Ser Val Arg Leu Arg Leu Pro Phe Thr Pro
                        295
                                            300
Ser Ser Gln Ser Ser Asp Met Glu Leu Met Asn Ala Ser Phe Asp Glu
                    310
                                        315
Lys Lys Arg Glu Leu Thr Thr Leu Ala Leu Gly Arg Gly Ile Gly Asp
                                    330
                325
Cys Gly Ile Gln Thr Arg Trp Arg Phe Asn Gly Gln Arg Phe Arg Leu
                                345
Val Arg Tyr Ala Glu Glu Pro Ser Cys Asp Asn Trp Asn Gly Pro Asp
                            360
Ala Trp Pro Thr Leu Trp Ile Thr Arg
<210> 10081
<211> 306
<212> PRT
<213> Enterobacter cloacae
<400> 10081
His Ser Ala Lys Ser Leu Trp Ser Thr Cys Gly Arg Ser Leu Met Ala
                                    10
               5
Glu Val Thr Gln Leu Lys Arg Tyr Asp Ala Pro Arg Ile Asn Trp Gly
                                25
Lys Trp Phe Leu Ile Gly Thr Gly Val Leu Val Ser Ala Phe Ile Leu
```

35 40 45 Val Val Pro Met Val Tyr Ile Phe Val Gln Ala Phe Ser Lys Gly Ile

Met Pro Ala Leu Gln Asn Leu Ala Asp Pro Asp Met Leu His Ala Ile

75

```
Trp Leu Thr Val Met Ile Ala Leu Ile Thr Val Pro Val Asn Leu Val
                                    90
Phe Gly Val Leu Leu Ala Trp Leu Val Thr Arg Phe Asn Phe Pro Gly
                                105
Arg Gln Leu Leu Thr Leu Leu Asp Ile Pro Phe Ala Val Ser Pro
                            120
Val Val Ala Gly Leu Val Tyr Leu Leu Phe Tyr Gly Ser Asn Gly Pro
                        135
                                            140
Leu Gly Gly Trp Leu Asp Glu His Asp Leu Gln Ile Met Phe Ala Trp
                    150
                                        155
Pro Gly Met Val Leu Val Thr Val Phe Val Thr Cys Pro Phe Val Val
                                    170
                165
Arg Glu Leu Val Pro Val Met Leu Ser Gln Gly Ser His Glu Asp Glu
                                185
            180
Ala Ala Val Leu Leu Gly Ala Ser Gly Trp Gln Met Phe Arg Arg Val
                            200
Thr Leu Pro Asn Ile Arg Trp Ala Leu Leu Tyr Gly Val Val Leu Thr
                        215
                                            220
Asn Ala Arg Ala Ile Gly Glu Phe Gly Ala Val Ser Val Val Ser Gly
                    230
                                        235
Ser Ile Arg Gly Glu Thr Leu Ser Leu Pro Leu Gln Ile Glu Leu Leu
                245
                                    250
Glu Gln Asp Tyr Asn Thr Val Gly Ser Phe Thr Ala Ala Ala Leu Leu
                                265
Thr Leu Met Ala Ile Leu Thr Leu Phe Leu Lys Ser Val Val Gln Trp
                            280
Arg Leu Glu Asn Gln Glu Lys Arg Gln His Gln Glu Gly Asn His Glu
                        295
His
305
<210> 10082
<211> 152
<212> PRT
<213> Enterobacter cloacae
<400> 10082
Arg Ser Ala Trp Met Val Glu Thr Pro Ala Ala Gly Thr Ile Gly Val
                                    10
His Leu Ala Lys Glu Val Asp Phe Phe Ser Ile Gly Thr Asn Asp Leu
Thr Gln Tyr Thr Leu Ala Val Asp Gly Gly Asn Asp Met Ile Ser His
                            40
Leu Tyr Gln Pro Met Ser Pro Ser Val Leu Asn Leu Ile Lys Gln Val
                        55
Ile Asp Ala Ser His Ala Glu Gly Lys Trp Thr Gly Met Cys Gly Glu
                    70
                                        75
Leu Ala Gly Asp Glu Arg Ala Thr Leu Leu Leu Gly Met Gly Leu
                85
                                    90
Asp Glu Phe Ser Met Ser Ala Ile Ser Ile Pro Arg Ile Lys Lys Ile
                                105
            100
                                                    110
Ile Arg Asn Thr Asn Phe Glu Asp Ala Lys Val Leu Ala Glu Gln Ala
                           120
                                                125
Leu Ala Gln Pro Thr Thr Asp Glu Leu Met Thr Leu Val Asn Lys Phe
                        135
Ile Glu Glu Lys Thr Ile Cys
<210> 10083
<211> 129
<212> PRT
```

## <213> Enterobacter cloacae

<400> 10083 Leu Asn Arg Leu Ala Val Pro Arg Gln Arg Val Gln Pro Cys Ala Ala 10 Leu Ser Ala Leu Phe Asn Gln Leu Ile Gln His Gly Trp Gly Glu 25 Arg Lys His Leu Cys Arg Ala Val Phe Asn Ala Gly Arg Ala Leu Arg Pro Phe Gln Ala Glu Val Ala Phe Val Arg Arg Gly Leu Tyr Ala Val 55 Val Phe Gln Arg Gly Asp Gln His Val His Arg Ala Lys Arg Thr Gly 75 His His Ala Gly Phe Thr Ala Asn Ala Phe Leu Leu Ile Asp Leu Tyr 90 Ala Val Ala Val Leu Arg Asp Gly Ser Val Arg Ala Ala Leu Arg Ala 105 Gly Arg Ile Phe Thr Val Val Ala Gly His Gly Ala Phe Ser Gln Ala 120

```
<210> 10084
<211> 197
<212> PRT
```

<213> Enterobacter cloacae

<400> 10084 Pro Arg Lys Gly Arg Thr Gly Leu Thr Thr Ser Ser Gln His Tyr Leu 10 Val Ile Thr Ala Leu Gly Ala Asp Arg Pro Gly Ile Val Asn Thr Ile 20 Thr Arg His Val Ser Ser Cys Gly Cys Asn Ile Glu Asp Ser Arg Leu 40 Ala Met Leu Gly Glu Glu Phe Thr Phe Ile Met Leu Leu Ser Gly Thr 55 60 Trp Asn Ala Ile Thr Leu Ile Glu Ser Thr Leu Pro Leu Lys Gly Ala 70 75 Glu Leu Asp Leu Leu Ile Val Met Lys Arg Thr Thr Ala Arg Pro Arg 90 Pro Ala Leu Pro Ala Thr Val Trp Val Gln Val Glu Val Pro Asp Ser 100 105 Pro His Leu Ile Glu Arg Phe Thr Ala Leu Phe Asp Ser His Gln Met 120 Asn Ile Ala Glu Leu Val Ser Arg Thr Gln Pro Gly Asp Glu Asn Ala 1.35 140 Ile Pro Thr Leu Phe Ile Gln Ile Thr Ala His Ser Pro Ala Ser Gln 150 155 Asp Ala Ser Asn Ile Glu Gln Ala Phe Lys Ala Leu Cys Thr Glu Leu 165 170 His Ala Gln Gly Ser Ile Ser Val Val Asp Tyr Ser Gln His Glu Gln 180 185

Asp Gly Val Glu 195

<210> 10085 <211> 154 <212> PRT <213> Enterobacter cloacae

<400> 10085

```
Ser Leu Ala Ala Cys Asn Arg Pro Ala Thr Met Arg Glu Ser Thr Ser
                                    1.0
Cys Ala Ala Cys Asn Asn Ala Leu Ser Arg Thr Arg Arg Cys Asn Lys
            20
                                25
Gly Glu Val Met Thr Asp Ala Val Lys Ile Tyr His Asn Pro Arg Cys
                            40
Ser Lys Ser Arg Glu Thr Leu Asn Leu Leu Lys Ser Asn Gly Ile Asp
                        55
Pro Glu Val Val Leu Tyr Leu Glu Thr Pro Pro Asp Ala Gln Thr Ile
                                        75
Arg Gln Leu Lys Met Leu Asn Met Gly Ser Ala Arg Asp Leu Met
                85
                                    90
Arg Gln Lys Glu Asp Leu Tyr Lys Ser Leu Asn Leu Asn Asp Thr Ser
            100
                                105
Leu Thr Glu Asp Arg Leu Ile Gln Ala Met Val Asp Asn Pro Lys Leu
                            120
Ile Glu Arg Pro Ile Val Val Ala Asn Gly Lys Ala Arg Ile Gly Arg
                        135
Pro Pro Glu Asp Val Leu Gly Ile Val
                    150
<210> 10086
<211> 232
<212> PRT
<213> Enterobacter cloacae
<400> 10086
Met Lys Asn Ile Val Val Leu Ile Ser Gly Asn Gly Ser Asn Leu Gln
                                    10
Ala Ile Ile Asp Ala Cys Lys Gln Lys Lys Ile Asn Gly Thr Ile Arg
            20
                                25
Ala Val Phe Ser Asn Lys Ala Asp Ala Phe Gly Leu Glu Arg Ala Arg
                            40
Glu Ala Asn Ile Pro Ala His Ala Leu Glu Ala Ser Gln Phe Ala Gly
Arg Glu Ala Phe Asp Arg Glu Leu Val Gln Glu Ile Asp Ala Tyr Ala
                    70
Pro Asp Val Val Leu Ala Gly Tyr Met Arg Ile Leu Ser Pro Ala
                                    90
Phe Val Ala His Tyr Ala Gly Arg Leu Leu Asn Ile His Pro Ser Leu
                                105
Leu Pro Lys Tyr Pro Gly Leu His Thr His Arg Gln Val Leu Glu Asn
                            120
Gly Asp Glu Glu His Gly Thr Ser Val His Phe Val Thr Asp Glu Leu
                        135
Asp Gly Gly Pro Val Ile Leu Gln Ala Lys Val Pro Val Phe Asp Gly
                    150
                                         155
Asp Asn Glu Asp Asp Val Thr Glu Arg Val Gln Ala Gln Glu His Ala
                165
                                    170
Ile Tyr Pro Leu Val Val Ser Trp Phe Val Asp Gly Arg Leu Glu Met
            180
                                185
                                                     190
Arg Asp Gly Ala Ala Trp Leu Asp Gly Val Lys Leu Pro Pro Gln Gly
                            200
       195
                                                205
Tyr Ala Ala Glu Gly Val Val Cys Leu Asn Cys Pro Ala Ala Leu Arg
                        215
Leu His Gly Pro Thr Val Pro
<210> 10087
<211> 179
<212> PRT
```

## <213> Enterobacter cloacae

<400> 10087 Leu Phe Thr Ser Ala Val Pro Lys Arg Thr Arg Phe Thr Ala Thr Gln 10 Asp Arg Lys Met Leu Asp Tyr Arg Phe Pro Thr Ala Leu Gln Met Val 25 Leu Ser Val Ala Met Ala Glu Gln Ser Gly Glu Arg Ser Thr Ser Ala Ile Leu Ala Tyr Gly Leu Glu Ala Asn Pro Ser Phe Ile Arg Lys Leu 55 Met Val Pro Leu Ala Arg Asp Gly Ile Ile Val Ser Thr Leu Gly Arg 75 Asn Gly Ser Ile His Leu Gly Arg Pro Ala Glu Glu Ile Thr Leu Arg 90 85 Asp Ile Tyr Leu Ser Val Thr Glu Asp Lys Lys Leu Trp Ala Ser Arg 105 Pro Asp Val Pro Ala Arg Cys Val Val Ser Ala Asn Ala Cys Trp Tyr 120 Phe Lys Ser Ile Ala Asp Glu Ala Glu Gln Ala Ser Leu Ala Val Leu 135 140 Ala Arg His Thr Val Ala Ser Ala Leu Glu Glu Val Lys Lys Ala Asp 150 155 Thr Ser Gly Cys Asp Pro Val Pro Glu Leu Cys Thr Gln His Lys Lys 165 170 Ala Pro

```
<210> 10088
<211> 173
<212> PRT
```

<213> Enterobacter cloacae

<400> 10088

Glu Lys Ile Met Gly Leu Phe Asp Lys Leu Lys Ser Leu Val Ser Asp Asp Lys Lys Asp Ser Gly Thr Ile Glu Ile Val Ala Pro Leu Ser Gly 20 Glu Ile Val Asn Ile Glu Asp Val Pro Asp Val Val Phe Ala Glu Lys Ile Val Gly Asp Gly Ile Ala Ile Lys Pro Thr Gly Asn Lys Met Val 55 Ala Pro Val Asp Gly Thr Ile Gly Lys Ile Phe Glu Thr Asn His Ala 75 Phe Ser Ile Glu Ser Asp Ser Gly Ile Glu Leu Phe Val His Phe Gly 85 Ile Asp Thr Val Glu Leu Lys Gly Glu Gly Phe Lys Arg Ile Ala Glu 105 110 Glu Gly Gln Arg Val Lys Val Gly Asp Pro Val Ile Glu Phe Asp Leu 120 125 Pro Leu Leu Glu Glu Lys Ala Lys Ser Thr Leu Thr Pro Val Val Ile 140 135 Ser Asn Met Asp Glu Ile Lys Glu Leu Ile Lys Leu Ser Gly Ser Val 150 155 Thr Val Gly Glu Thr Pro Val Ile Arg Ile Lys Lys

170

<sup>&</sup>lt;210> 10089

<sup>&</sup>lt;211> 309

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
<400> 10089
Ser Lys Ser Ala Leu Gln Glu Thr Leu Met Lys Pro Asn Ala Gln Leu
                                    10
Val Lys Thr Phe Leu Met Gln Leu Gln Asp Ala Ile Cys Gln Lys Leu
                                25
Ser Ala Ala Asp Gly Gly Glu Phe Gln Glu Asp Ala Trp Gln Arg Glu
Ala Gly Gly Gly Arg Ser Arg Val Leu Arg Asn Gly Gly Ile Phe
                        55
Glu Gln Ala Gly Val Asn Phe Ser His Val His Gly Asp Ala Met Pro
Ala Ser Ala Thr Ala His Arg Pro Glu Leu Ala Gly Arg Ser Phe Glu
                8.5
Ala Met Gly Val Ser Leu Val Ala His Pro His Asn Pro Phe Val Pro
            100
                                105
Thr Ser His Ala Asn Val Arg Phe Phe Ile Ala Glu Lys Pro Gly Ala
                            120
                                                125
Asp Pro Val Trp Trp Phe Gly Gly Gly Phe Asp Leu Thr Pro Tyr Tyr
                        135
                                            140
Gly Phe Glu Glu Asp Ala Val His Trp His Thr Thr Ala Arg Asp Leu
                    150
                                        155
Cys Leu Pro Phe Gly Glu Asp Val Tyr Pro Lys Tyr Lys Lys Trp Cys
                                    170
                165
Asp Asp Tyr Phe Tyr Leu Lys His Arg Asp Glu Gln Arg Gly Ile Gly
            180
                                185
                                                     190
Gly Leu Phe Phe Asp Asp Leu Asn Thr Pro Asp Phe Asp Thr Ala Phe
                            200
                                                205
Ser Phe Met Arg Ala Val Gly Glu Gly Phe Thr Asp Ala Tyr Leu Pro
                        215
                                            220
Ile Val Glu Arg Arg Lys Asn Thr Asp Tyr Gly Val Arg Glu Arg Glu
                    230
                                        235
Phe Gln Leu Tyr Arg Arg Gly Arg Tyr Val Glu Phe Asn Leu Val Trp
                245
                                    250
Asp Arg Gly Thr Leu Phe Gly Leu Gln Thr Gly Gly Arg Thr Glu Ser
            260
                                265
Ile Leu Met Ser Met Pro Pro Leu Val Arg Trp Glu Tyr Ser Tyr Ala
                            280
                                                285
Pro Lys Glu Gly Ser Pro Glu Ala Ala Leu Ser Glu Phe Ile Arg Val
    290
                        295
Arg Asp Trp Val
305
<210> 10090
<211> 325
<212> PRT
<213> Enterobacter cloacae
<400> 10090
Leu Phe Tyr Phe Gln Gly Val Ile Met Asn Gln Leu Asp Gly Ile Lys
                                    10
Gln Phe Thr Thr Val Val Ala Asp Ser Gly Asp Ile Glu Ser Ile Arg
                                2.5
His Tyr Gln Pro Glu Asp Ala Thr Thr Asn Pro Ser Leu Leu Lys
                            40
Ala Ala Gly Leu Ala His Phe Ser His Leu Ile Asp Asp Ala Leu Ala
                        55
Tyr Gly Lys Gln Arg Gly Gln Thr Gln Glu Gln Gln Val Ala Glu Ala
                    70
                                        75
Ser Asp Lys Leu Ala Val Asn Ile Gly Ala Glu Ile Leu Lys Ser Ile
```

```
Pro Gly Arg Val Ser Thr Glu Val Asp Ala Arg Leu Ser Phe Asp Gln
            100
                                105
Glu Lys Ser Ile Asn Lys Ala Arg Arg Leu Val Glu Leu Tyr Gln Glu
                            120
                                                125
Gln Gly Ile Asp Lys Ser Arg Ile Leu Ile Lys Leu Ala Ser Thr Trp
                        135
                                            140
Glu Gly Ile Arg Ala Ala Glu Val Leu Glu Lys Asp Gly Ile His Cys
                    150
                                         155
Asn Leu Thr Leu Leu Phe Ser Phe Ala Gln Ala Arg Ala Cys Ala Glu
                                    170
                165
Ala Gly Val Phe Leu Ile Ser Pro Phe Val Gly Arg Ile Tyr Asp Trp
            180
                                185
Tyr Gln Ala Lys Gln Pro Met Asp Pro Tyr Val Val Glu Glu Asp Pro
                            200
                                                 205
Gly Val Lys Ser Val Arg Asn Ile Tyr Asp Tyr Tyr Lys Gln His Arg
                        215
                                            220
Tyr Glu Thr Ile Val Met Gly Ala Ser Phe Arg Arg Thr Glu Gln Ile
                    230
                                         235
Leu Ala Leu Ala Gly Cys Asp Arg Leu Thr Ile Ser Pro Glu Leu Leu
                                    250
                245
Lys Lys Leu Gln Glu Ser Glu Glu Thr Val Ile Arg Lys Leu Val Pro
            260
                                265
                                                     270
Thr Ser Thr Val Leu Pro Lys Pro Lys Pro Met Thr Glu Ala Glu Phe
        275
                            280
                                                 285
Arg Trp Glu His Asn Gln Asp Pro Met Ala Val Glu Lys Leu Ala Asp
    290
                        295
                                            300
Gly Ile Arg Gln Phe Ala Val Asp Gln Arg Lys Leu Glu Asp Leu Leu
                    310
                                         315
Ala Ala Lys Leu
                325
<210> 10091
<211> 128
<212> PRT
<213> Enterobacter cloacae
<400> 10091
Ile His Lys Arg Thr Lys Gly Phe Thr Met Val Val Met Tyr Gly Ile
                                    10
Lys Asn Cys Asp Thr Ile Lys Lys Ala Arg Arg Trp Leu Glu Ala His
            20
Asn Ile Asp Tyr Arg Phe His Asp Tyr Arg Ala Asp Gly Leu Asp Pro
                            40
Ala Phe Leu His Ser Ala Ile Asn Glu Leu Gly Trp Glu Ala Leu Leu
Asn Thr Arg Gly Thr Thr Trp Arg Lys Leu Asp Glu Ser Leu Arg Ala
                                         75
Thr Ile Asn Asp Ala Asp Ser Ala Ala Lys Leu Met Leu Glu Met Pro
                                    90
Ala Ile Ile Lys Arg Pro Leu Leu Cys Lys Pro Gly Gln Pro Met Leu
            100
                                105
Leu Gly Phe Ser Glu Thr Leu Tyr Ser Asp Leu Phe Val Glu Val
                            120
<210> 10092
<211> 377
<212> PRT
<213> Enterobacter cloacae
```

<400> 10092 Ser Met Ser Cys Pro Val Ile Glu Leu Thr Gln Gln Leu Ile Arg Arg

```
10
Pro Ser Leu Ser Pro Asp Asp Ala Gly Cys Gln Ala Leu Met Ile Glu
            20
                                25
Arg Leu Arg Ala Ile Gly Phe Thr Val Glu His Met Asp Phe Gly Asp
                            40
                                                 45
Thr Gln Asn Phe Trp Ala Trp Arg Gly Gln Gly Glu Thr Leu Ala Phe
                        55
Ala Gly His Thr Asp Val Val Pro Ala Gly Asp Ala Asp Arg Trp Ile
                    70
                                        75
Asn Pro Pro Phe Glu Pro Thr Ile Arg Asp Gly Met Leu Phe Gly Arg
                                    90
Gly Ala Ala Asp Met Lys Gly Ser Leu Ala Ala Met Val Val Ala Ala
                                105
Glu Arg Phe Val Ala Gln His Pro Asn His Lys Asn Arg Leu Ala Phe
                            120
                                                125
Leu Ile Thr Ser Asp Glu Glu Ala Ser Ala His Asn Gly Thr Val Lys
                        135
                                            140
Val Val Glu Ala Leu Met Ala Arg Asn Glu Arg Leu Asp Tyr Cys Leu
                    150
                                        155
Val Gly Glu Pro Ser Ser Thr Glu Val Val Gly Asp Val Val Lys Asn
                                    170
                165
Gly Arg Arg Gly Ser Leu Thr Cys Asn Leu Thr Ile His Gly Val Gln
            180
                                185
                                                     190
Gly His Val Ala Tyr Pro His Leu Ala Asp Asn Pro Val His Arg Ala
                            200
Ala Pro Met Leu Asn Glu Leu Val Ser Ile Glu Trp Asp Lys Gly Asn
                                             220
                        215
Glu Phe Phe Pro Pro Thr Ser Met Gln Ile Ala Asn Ile Lys Ala Gly
                    230
                                     , 235
Thr Gly Ser Asn Asn Val Ile Pro Gly Asp Leu Phe Val Gln Phe Asn
                                    250
                245
Phe Arg Phe Ser Thr Glu Leu Thr Asp Glu Met Ile Lys Ala Arg Val
            260
                                265
                                                     270
Ile Ala Leu Leu Glu Lys Tyr Gln Leu Arg Tyr Thr Leu Asp Trp Trp
                            280
Leu Ser Gly Gln Pro Phe Leu Thr Gln Arg Gly Lys Leu Val Asp Ala
                        295
                                             300
Val Val Asn Ala Ile Ala His Tyr Asn Glu Ile Lys Pro Gln Leu Leu
                    310
                                        315
Thr Thr Gly Gly Thr Ser Asp Gly Arg Phe Ile Ala Arg Met Gly Ala
                                    330
Gln Val Val Glu Leu Gly Pro Val Asn Ala Thr Ile His Lys Ile Asn
                                345
Glu Cys Val Asn Ala Ala Asp Leu Gln Leu Leu Ala Arg Met Tyr Gln
                            360
Arg Ile Met Glu Gln Leu Val Ala
<210> 10093
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 10093
Arg Met Asp Trp Leu Ser Lys Tyr Trp Trp Ile Leu Val Leu Val Phe
                                    10
Leu Val Gly Val Leu Leu Asn Val Ile Lys Asp Leu Lys Arg Val Asp
```

25 His Lys Lys Phe Leu Ala Asn Lys Pro Asp Leu Pro Pro His Arg Asp 40 Phe Asn Asp Lys Trp Asp Asp Glu Asp Asp Trp Pro Lys Lys Asp Gln

60

55

```
Lys Lys
65
<210> 10094
<211> 476
<212> PRT
<213> Enterobacter cloacae
<400> 10094
Gly Val Met Met Ile Thr Tyr Gln Phe Ile Asn Ala Leu Ser Asp Ala
Lys Pro Gln Ser His Leu Ile Ala Arg Ala Asp Ser Ser Leu Leu Pro
                                25
Asp Ser Ala Leu Ile Ala Glu Met Arg Gln Gln Ser Thr Val Ala Asp
Ala Arg Phe Gly Cys Ala Pro Phe Ala Arg Ile Thr Leu Leu Pro Asp
                        55
Ala Leu Trp His Asp Ala Leu Thr Glu Gly Leu Ile Thr Ala Leu Arg
                    70
                                        7.5
Pro Leu Leu Thr Ala Pro Ala Ser Ala Glu Leu Val Leu Asp Val Thr
                85
                                    90
Asp Ile Asp Asp Val Val Leu Ala Gln Val Leu Arg Phe Leu Phe Asn
           100
                                105
Gln Ala His Met Leu Ser Asp Leu Lys Leu Lys Lys Thr Asp Glu Ala
                            120
Leu Arg Leu Thr Cys Ile Thr Ala Leu Cys Leu Pro Glu Gln Gln Ala
                        135
                                            140
Lys Leu Glu Thr Thr Phe Arg Gln Gln Gln Ala Ile Ala Leu Gly Met
                    150
                                        155
Val Ala Ala Arg Arg Leu Ala Asp Met Pro Ser Asp Arg Cys Thr Pro
                165
                                    170
Gln Phe Val Val Glu Glu Ala Gln Lys Leu Cys Ala Ala Ser Pro Ala
                                185
Leu Arg Cys Glu Val Leu Asp Glu Lys Gln Ile Val Glu Gln Gly Leu
        195
                            200
Gly Leu Leu His Ala Val Gly Lys Gly Ala Thr Cys Pro Pro Arg Leu
                        215
Leu Ala Ile His Tyr Asn Gly Val Ser Asp Gly Pro Val Arg Cys Tyr
                    230
                                        235
Val Gly Lys Gly Ile Thr Phe Asp Thr Gly Gly Leu Trp Leu Lys Glu
                245
                                    250
Gly Ala Gly Met Tyr Thr Met Lys Tyr Asp Met Cys Gly Ala Ala Asn
                                265
Val Leu Gly Leu Met Leu Thr Val Ala Glu Gln Lys Leu Pro Val Arg
                            280
Ile Met Gly Val Leu Ala Leu Ala Glu Asn Ala Ile Gly Pro Asp Ala
                        295
                                            300
Met Gln Pro Gly Thr Val Ala Thr Ala Cys Asn Gly Ile Thr Val Glu
                    310
                                        315
Ile Asn Asn Thr Asp Ala Glu Gly Arg Leu Val Leu Ala Asp Ala Ile
                                    330
                325
Ala Trp Ala Ser Gln Arg His Pro Gln Ala His Tyr Ile Ile Asp Met
                                345
Ala Thr Leu Thr Gly Ala Val Val Lys Ala Leu Gly Tyr Glu Leu Ser
                            360
                                                365
Gly Leu Met Thr Gln Asp Glu Pro Leu Arg Gln Ala Leu Thr Leu Ala
                        375
                                            380
Gly Lys Arg Ser Gly Asp Glu Val Trp Ser Leu Pro Leu Asp Ala Arg
                                        395
                    390
Leu Arg Lys Gln Thr Asp Ser Ala Ile Ala Asp Leu Cys Asn Thr Pro
```

405 410 Thr Asn Asn Ala Ala Ile Ser Ala Ser Ala Ala Trp Leu Leu His His 420 425 Phe Cys Pro Pro Thr Ile Pro Trp Ala His Leu Asp Ile Ser Gly Thr 440 Ala Leu Trp Arg Glu Asn Gly Arg Ser Val Ala Ser Gly Arg Pro Ile 455 Pro Leu Leu Val Glu His Leu Leu Gly Asp Leu 470 <210> 10095 <211> 347 <212> PRT <213> Enterobacter cloacae <400> 10095 Ala Val Thr Asn Lys Thr Ser Leu Ser Tyr Lys Asp Ala Gly Val Asp 10 Ile Asp Ala Gly Asn Ala Leu Val Asp Arg Ile Lys Gly Val Val Lys 20 25 Lys Thr Arg Arg Pro Glu Val Met Gly Gly Leu Gly Gly Phe Gly Ala Leu Cys Ala Leu Pro Gln Lys Tyr Arg Glu Pro Val Leu Val Ser Gly 50 55 Thr Asp Gly Val Gly Thr Lys Leu Arg Leu Ala Met Asp Leu Lys Arg His Asp Thr Ile Gly Ile Asp Leu Val Ala Met Cys Val Asn Asp Leu 85 90 Val Val Gln Gly Ala Glu Pro Leu Phe Phe Leu Asp Tyr Tyr Ala Thr 105 110 100 Gly Lys Leu Asp Val Asp Thr Ala Ala Ser Val Ile Asn Gly Ile Ala 120 Glu Gly Cys Leu Gln Ser Gly Cys Ala Leu Val Gly Gly Glu Thr Ala 135 140 Glu Met Pro Gly Met Tyr His Gly Glu Asp Tyr Asp Val Ala Gly Phe 150 155 Cys Val Gly Val Val Glu Lys Ser Glu Ile Ile Asp Gly Ser Lys Val 170 Ala Asp Gly Asp Val Leu Val Ala Leu Ala Ser Ser Gly Pro His Ser 180 185 Asn Gly Tyr Ser Leu Val Arg Lys Ile Leu Glu Val Ser Gly Cys Asp 200 Pro Leu Thr Thr Glu Leu Asp Gly Lys Pro Leu Ala Asp His Leu Leu 215 Ala Pro Thr Arg Ile Tyr Val Lys Asn Val Leu Glu Leu Ile Glu Asn 230 235 Val Asp Val His Ala Ile Ala His Leu Thr Gly Gly Phe Trp Glu 250 Asn Ile Pro Arg Val Leu Pro Asp Asn Thr Gln Ala Val Ile Asp Ala 265 Ser Ser Trp Gln Trp Pro Ser Val Phe Asn Trp Leu Gln Thr Ala Gly 280 Asn Val Ser Glu His Glu Met Tyr Arg Thr Phe Asn Cys Gly Val Gly 300 295 Met Val Ile Ala Leu Pro Ala Ser Glu Ala Asp Lys Ala Ile Lys Leu 310 315 Leu Thr Glu Lys Gly Glu Asn Ala Trp Lys Ile Gly Thr Ile Lys Ala 325 330 Ser Asp Ser Glu Gln Arg Val Val Ile Glu

<210> 10096

<211> 689 <212> PRT <213> Enterobacter cloacae <400> 10096 Ala Val Met Gly Gln Glu Lys Leu Tyr Ile Glu Lys Glu Leu Ser Trp Leu Ala Phe Asn Glu Arg Val Leu Gln Glu Ala Ala Asp Lys Thr Asn 25 Pro Leu Ile Glu Arg Met Arg Phe Leu Gly Ile Tyr Ser Asn Asn Leu Asp Glu Phe Tyr Lys Val Arg Phe Ala Glu Leu Lys Arg Arg Ile Ile 55 Ile Ser Glu Glu Gln Gly Leu Asn Ser His Ser Arg His Leu Leu Gly 70 75 Lys Ile Gln Ser Arg Val Met Lys Ala Asp Gln Glu Phe Asp Gly Leu 85 90 Tyr Asn Glu Leu Leu Glu Met Ala Arg Asn Gln Ile Phe Leu Ile 100 105 110 Asn Glu Arg Gln Leu Ser Ala Asn Gln Gln Asn Trp Leu Arg His Tyr 115 120 125 Phe Lys His Tyr Leu Arg Gln His Ile Thr Pro Ile Leu Ile Asn Arg 130 135 140 Glu Thr Asp Leu Val Gln Phe Leu Lys Asp Asp Tyr Thr Tyr Leu Ala 150 155 Val Glu Ile Ile Arg Gly Glu Thr Ile Asn Tyr Ala Leu Leu Glu Ile 165 170 Pro Ser Asp Lys Val Pro Arg Phe Val Asn Leu Pro Pro Glu Thr Pro 180 185 Arg Arg Arg Lys Pro Met Ile Leu Leu Asp Asn Ile Leu Arg Tyr Cys 195 200 205 Leu Asp Asp Ile Phe Lys Gly Phe Phe Asp Tyr Asp Ala Leu Asn Ala 210 215 220 Tyr Ser Met Lys Met Thr Arg Asp Ala Glu Tyr Asp Leu Val His Glu 230 235 Met Glu Ala Ser Leu Met Glu Leu Met Ser Ser Leu Lys Gln Arg 245 250 Leu Thr Ala Glu Pro Val Arg Phe Val Tyr Gln Arg Asp Met Pro Asp 265 Ala Met Val Glu Met Leu Arg Asp Lys Leu Thr Ile Ser Arg Tyr Asp 280 Ser Ile Ile Pro Gly Gly Arg Tyr His Asn Phe Lys Asp Phe Ile Gly 295 300 Phe Pro Asn Val Gly Lys Ala Asn Leu Val Asn Lys Pro Leu Pro Arg 310 315 Leu Arg His Ile Trp Phe Asp Lys Phe Arg Asn Gly Phe Asp Ala Ile 330 325 Arg Glu Arg Asp Val Leu Leu Tyr Tyr Pro Tyr His Thr Phe Glu His 345 Val Leu Glu Leu Leu Arg Gln Ala Ser Phe Asp Pro Asn Val Leu Ala 360 Ile Lys Ile Asn Ile Tyr Arg Val Ala Lys Asp Ser Arg Ile Ile Asp 375 380 Ala Met Ile His Ala Ala His Asn Gly Lys Lys Val Thr Val Val Val 390 395 Glu Leu Gln Ala Arg Phe Asp Glu Glu Ala Asn Ile His Trp Ala Arg 405 410 Arg Leu Thr Glu Ala Gly Val His Val Ile Phe Ser Ala Pro Gly Leu 425 Lys Ile His Ala Lys Leu Phe Leu Ile Ser Arg Lys Glu Gly Asp Glu

435 440 445 Val Val Arg Tyr Ala His Ile Gly Thr Gly Asn Phe Asn Glu Lys Thr 455 460 Ala Arg Ile Tyr Thr Asp Tyr Ser Leu Leu Thr Ala Asp Ala Arg Ile 470 475 Thr Asn Glu Val Arg Arg Val Phe Asn Phe Ile Glu Asn Pro Tyr Arg 485 490 Pro Val Ser Phe Asp Tyr Leu Leu Val Ser Pro Gln Asn Ser Arg Arg 505 Leu Leu Tyr Asp Met Ile Asp Lys. Glu Ile Ala Asn Ala Gln Asn Gly 520 Leu Ser Ser Gly Ile Thr Leu Lys Leu Asn Asn Leu Val Asp Lys Gly 535 Leu Val Asp Arg Leu Tyr Ala Ala Ser Ser Ser Gly Val Pro Val Asn 550 555 Leu Leu Ile Arg Gly Met Cys Ser Leu Ile Pro Glu Leu Glu Gly Ile 565 570 Ser Asp Asn Ile Arg Val Ile Ser Ile Val Asp Arg Tyr Leu Glu His 585 Asp Arg Val Tyr Ile Phe Asp Asn Ala Gly Asp Lys Arg Val Tyr Leu 600 Ser Ser Ala Asp Trp Met Thr Arg Asn Ile Asp Tyr Arg Ile Glu Val 615 620 Ala Ala Pro Leu Leu Asp Pro Arg Leu Lys Gln Arg Ile Leu Asp Ile 630 635 Ile Glu Ile Leu Phe Ser Asp Thr Val Lys Ala Arg Tyr Ile Asp Lys 645 650 Glu Leu Ser Asn Arg Tyr Val Pro Arg Gly Asn Arg Arg Lys Val Arg 660 670 665 Ser Gln Leu Ala Ile Tyr Asp Tyr Ile Lys Ser Leu Glu Gln Pro Asp 680

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<210> 10097
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## <400> 10097

Pro Met Pro Ile Asn Asp Asn Thr Pro Arg Pro Gln Glu Phe Ala Ala 10 Val Asp Leu Gly Ser Asn Ser Phe His Met Val Ile Ala Arg Glu Val 20 Asp Gly Ala Met Gln Ile Ile Gly Arg Leu Lys Gln Arg Val His Leu 40 Ala Asp Gly Leu Asp Ala Arg Asn Met Leu Ser Glu Glu Ala Met Glu Arg Gly Leu Asn Cys Leu Ser Leu Phe Ala Glu Arg Leu Gln Gly Phe 75 Ser Pro Ser Ser Val Cys Ile Val Gly Thr His Thr Leu Arg Gln Ala 90 Leu Asn Ala Pro Glu Phe Leu Lys Arg Ala Glu Lys Val Ile Pro Tyr 100 105 Pro Ile Glu Ile Ile Ser Gly Asn Glu Glu Ala Arg Leu Ile Phe Met 120 125 Gly Val Glu His Thr Gln Pro Glu Lys Gly Arg Lys Leu Val Ile Asp 135 140 Ile Gly Gly Gly Ser Thr Glu Leu Val Ile Gly Glu Asp Phe Glu Pro 150 155 Arg Leu Val Glu Ser Arg Arg Met Gly Cys Val Ser Phe Ala Gln Met

<sup>&</sup>lt;211> 514

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
165
                                    170
Tyr Phe Pro Gly Gly Val Ile Thr Arg Glu Asn Phe Gln Arg Ala Arg
            180
                               185
                                                    190
Met Ala Ala Val Gln Lys Leu Glu Asn Leu Ala Trp Gln Tyr Arg Ile
                            200
                                                205
Gln Gly Trp Asn Val Ala Leu Gly Ala Ser Gly Ser Ile Lys Ala Ala
                        215
His Glu Val Leu Leu Ala Met Gly Glu Lys Asp Gly Phe Ile Thr Pro
                    230
                                         235
Glu Arg Leu Val Lys Leu Thr Glu Glu Val Leu Lys His Lys Ser Phe
                245
                                    250
Asp Ala Leu Ser Leu Pro Gly Leu Ser Asp Glu Arg Lys Ala Val Phe
                                265
            260
Val Pro Gly Leu Ala Ile Leu Cys Gly Val Phe Asp Ala Leu Ala Ile
                            280
Lys Glu Leu Arg Leu Ser Asp Gly Ala Leu Arg Glu Gly Val Leu Tyr
                        295
                                             300
Glu Met Glu Gly Arg Phe Arg His Gln Asp Ile Arg Ser Arg Thr Ala
                    310
                                         315
Gln Ser Leu Ala Asn Gln Tyr Asn Ile Asp Arg Glu Gln Ala Lys Arg
                                                         335
                325
                                    330
Val Leu Glu Thr Thr Val Gln Met Tyr Glu Gln Trp Glu Glu Gln Asn
            340
                                345
                                                     350
Pro Lys Leu Ala His Pro Gln Leu Ala Ala Leu Leu Lys Trp Ala Ala
                            360
                                                 365
Met Leu His Glu Val Gly Leu Asn Ile Asn His Ser Gly Met His Arg
                        375
                                             380
His Ser Ala Tyr Ile Leu Gln Asn Ser Asp Leu Pro Gly Phe Asn Gln
                    390
                                         395
Glu Gln Gln Thr Met Met Ala Thr Leu Val Arg Tyr His Arg Lys Ala
                405
                                     410
Ile Lys Leu Asp Asp Leu Pro Arg Phe Thr Leu Phe Lys Lys Gln
                                425
                                                     430
Phe Leu Pro Leu Ile Gln Leu Leu Arg Leu Gly Val Leu Leu Asn Asn
                            440
Gln Arg Gln Ala Thr Thr Thr Pro Pro Thr Leu Lys Leu Lys Thr Asp
                        455
Asp Tyr His Trp Thr Leu Ser Phe Pro His Asp Trp Phe Ser Gln Asn
                                         475
                    470
Ala Leu Val Leu Leu Asp Leu Glu Lys Glu Gln Gln Tyr Trp Glu Ala
                                    490
Val Thr Gly Trp Leu Leu Lys Ile Glu Glu Glu Ser Ser Glu Ala Ala
Ala
```

```
<210> 10098
```

<400> 10098

```
        Pro Tyr Arg
        Pro Lys Gly
        Tyr Thr Gln
        Glu Lys Lys
        Val
        Ser Gln
        Ala

        1
        5
        10
        15

        Thr Arg Met
        Arg Lys Arg His Arg Phe Asn Thr Arg Met
        Thr Arg Ile

        20
        25
        30

        Ile Leu Leu Ile Ser Phe Leu Phe Phe Phe Gly Arg Phe Val Tyr Ser
        45

        Ser Ile Gly Ala Trp Tyr His His Gln Asp Lys Ile Gln Ser Gln Gln
        50

        50
        55
        60
```

Ser Gly Leu Val Val Asp Ser Pro Glu Arg

<sup>&</sup>lt;211> 75

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<210> 10099

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<211> 412
<212> PRT
<213> Enterobacter cloacae
<400> 10099
Lys Ile Met Glu Thr Pro Ala Leu Pro Arg Arg Leu Ala Leu Thr Ala
Gly Cys Asn Gln Leu Ile Asn Trp Gly Ile Ser Phe Tyr Met Pro Gly
                                25
Thr Phe Ala His Ala Ile Thr Ala Asp Arg Ser Trp Ser Ser Pro Glu
Ile Tyr Leu Gly Leu Thr Leu Ala Met Leu Val Met Ala Ile Val Ser
                        55
Pro Phe Val Ala Pro Leu Leu Ala Arg Phe Gly Gly Gln Arg Val Val
                    70
Met Ser Gly Thr Leu Leu Ile Ala Val Ser Cys Leu Ser Met Ala Phe
                85
Thr Pro Thr Leu Ser Gly Trp Tyr Gly Ala Trp Leu Leu Thr Gly Ile
            100
                                105
Gly Met Arg Leu Ser Leu Tyr Asp Ala Leu Phe Ser Ala Leu Val Asp
                            120
        115
                                                125
Leu Tyr Gly Pro Gln Ala Arg Arg Thr Ile Ser Arg Val Thr Leu Ala
                        135
                                            140
    130
Gly Gly Leu Ala Ser Ala Val Phe Trp Pro Leu Gly Asp Ala Leu Leu
                    150
                                        155
Asn Val Met Gly Trp Gln Asp Ala Leu Lys Ile Tyr Ala Leu Phe Gly
                                    170
                165
Leu Leu Ser Ala Leu Leu Leu Arg Arg Phe Pro Arg Gln Arg Phe Thr
            180
                                185
Val Lys Pro Lys Ala Cys Thr Gln Val Ser Pro His Asp Arg Arg Asn
                            200
                                                205
Gly Trp Leu Tyr Ala Thr Phe Ile Ala Leu Ile Thr Phe Val Ser Asn
                        215
                                            220
Gly Thr Ser Thr His Leu Pro Glu Phe Ile Ala Ser Phe Gly Leu Pro
                    230
                                        235
Val Ala Val Gly Met Leu Trp Gly Met Gly Gln Thr Gly Ala Arg Leu
                245
                                    250
Met Glu Val Leu Ala Gly Ala Arg Leu Thr Pro Leu Lys Leu Thr Leu
                                265
Phe Thr Ala Leu Ala Met Pro Leu Cys Phe Leu Ile Gly Leu Ser Ser
                            280
Asp Met Leu Ala Trp Cys Ala Ala Gly Phe Val Phe Gly Phe Gly Ala
                        295
                                            300
Ile Asn Gly Leu Val Thr Ile Val Lys Ala Thr Leu Pro Leu Glu Leu
                    310
                                         315
Phe Ser Thr Glu Arg Tyr Ala Ser Arg Thr Gly Leu Leu Ile Pro
                325
                                    330
Gly Gln Leu Met Ala Ala Ala Ser Pro Phe Ala Tyr Ala Trp Leu Asn
                                345
Lys Ser Leu Gly Ile Thr Gly Gly Met Trp Val Ser Ala Gly Leu Thr
                            360
Leu Val Ile Ala Gly Phe Ala Val Ala Leu Val Arg Ser Pro Gly Lys
                        375
                                            380
Gln Thr Val Ser His Cys Ile Pro Ser Ala Thr Leu Thr Asn Arg Tyr
                    390
                                        395
Lys Thr Pro Ala Glu Ala Asn Ile Pro Asp Thr
```

<210> 10100

<211> 469 <212> PRT <213> Enterobacter cloacae <400> 10100 Tyr Arg Thr Arg Ser Glu Gly Gly Arg Leu Met Arg Asn Phe Trp His 10 His Leu Arg Leu Pro Thr Leu Val Arg Arg Met Leu Val Ala Gln Met Leu Leu Thr Leu Leu Trp Cys Leu Phe Leu Thr Phe Ile Leu Leu Glu Asp Leu Arg Ser Pro Pro Ile Leu Thr Gly Ser Glu Thr Tyr Glu 55 Thr Val Phe Ser Leu Val Glu Ser Met Asp Asp Arg Pro Gln Ala Arg 70 75 Asp Ala Val Leu Ala Ala Phe Ser Lys Ala Leu Arg Glu Gly Tyr Gly 85 Gly Glu Tyr Pro Glu Leu Ser Ile Asn Leu Ile Val Arg Lys Asn 100 105 110 Asn Glu Ile Ile Phe Ser Ser Asp Gly Ala Pro Thr Gly Val Lys Asn 120 Ser Arg Leu Gly Val Met Gln His Val Gln Ser Glu Asp His Thr Trp 135 140 Thr Ser Arg Thr Leu Lys Ser Ala His Ser Asp Val Glu Val Thr Leu 150 155 Phe Thr Pro Ala Gly Ser Trp Asn Phe Phe Ile Tyr Leu Asn Ser Arg 165 170 Gly Tyr Tyr Val Met Pro Leu Met Ile Cys Ile Pro Phe Leu Leu Phe 180 185 Pro Ala Trp Leu Ser Ile Arg Ile Ala Met Arg Pro Trp Asn Lys Val 195 200 205 Val Asp Glu Ile Ser Leu Arg Thr Pro Asp Asp Leu Ser Pro Leu Lys 215 220 Ala Val Pro Arg His Arg Glu Leu Arg Gln Thr Val Asp Ala Ile Asn 230 235 Asp Phe Leu Ala Arg Val Gln Glu Ser Ala Glu Arg Glu Lys Met Phe 245 250 Ile Ala Asp Ala Ala His Glu Leu Arg Thr Pro Leu Ala Ala Met Arg 260 265 Ile Asn Val Glu Ala Leu Gln Ser Trp Val Ile Ser Glu Ser Gln Gln 280 Glu Leu Leu Ala Gly Ile Val Arg Ser Asn Ser Arg Ala Ala Arg Leu 295 300 Ile Asn Gln Leu Leu Met Met His Ser Glu Ala His Ile Ser Pro 315 Val Pro Leu Thr Thr Leu Ile Gln Glu Arg Met Ala Ala Leu Glu Pro 330 Leu Ala Ser Gly Arg Arg Ile Glu Phe Glu Phe Phe Ala Asp Asp Glu 345 Ile His Val Ala Gly Ile Arg Glu Arg Leu Val Ser Leu Ile Asp Asn 360 Leu Ile Glu Asn Ala Val Lys Tyr Ser Pro Glu Gly Gly Arg Ile Glu 375 380 Val Gln Leu Gln Ser Arg Asp Lys Cys Ala Gln Leu Arg Val Ser Asp 390 395 Ala Gly Pro Gly Ile Pro Ile Glu Leu Arg Glu Arg Val Phe Asp Arg 410 Phe Phe Arg Asp Pro Asn Gln Thr Gln Ser Gly Ser Gly Leu Gly Leu 425 Ala Ile Val Lys Ala Val Thr Gln Gln His Asn Gly Arg Val Asn Leu

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435
                            440
                                                 445
Ser Thr Ser Ala Glu Gly Gly Leu Met Val Thr Val Asp Phe Pro Asn
                        455
Pro Ala Phe Ala
465
<210> 10101
<211> 107
<212> PRT
<213> Enterobacter cloacae
<400> 10101
Lys Arg Val Thr Phe Lys Cys Asn Lys Gln Arg Cys Phe Leu Met Arg
                                     10
Gly Val Gly Gly Ser Lys Met Asn Thr Gly Ala Phe Ile His Asp Leu
            20
                                25
Leu Asp Trp Ile Asp Asn Asn Leu Asp Ser Arg Leu Asp Ile Glu Thr
                            40
Val Ser Arg Arg Ala Gly Tyr Ser Lys Trp His Leu Gln Arg Leu Phe
                        55
Lys Glu His Thr Gly Ser Pro Leu Ala Glu Tyr Ile Arg Ala Gln Lys
                    70
                                         75
Leu Gln Lys Ser Val Glu Arg Leu Ala His Ser His Glu Pro Ile Leu
                85
                                     90
Tyr Val Asp Leu Thr Thr Gly Lys Arg Ser Ala
            100
                                105
<210> 10102
<211> 303
<212> PRT '
<213> Enterobacter cloacae
<400> 10102
His Gln Asp Pro Asn Phe Tyr Asn Ser Gly Arg Met Ser Thr Phe Lys
                                     10
Pro Leu Lys Ala Leu Thr Ser Arg Arg Gln Val Leu Lys Ala Gly Leu
            20
                                25
Ala Ala Leu Thr Leu Thr Gly Ile Ala Lys Gln Ala Gln Ala Lys Asp
Glu Ser Thr Leu Lys Thr Ser Asn Gly His Ser Lys Pro Lys Thr Lys
Lys Ala Gly Ala Lys Arg Leu Val Met Leu Asp Pro Gly His Gly Gly
                    70
                                        75
                                                             80
Ile Asp Thr Gly Ala Ile Gly Arg Asn Gly Ser Lys Glu Lys His Val
                                     90
Val Leu Ala Ile Ala Lys Asn Val Arg Ala Ile Leu Arg Ser Asn Gly
                                105
Ile Asp Ala Arg Leu Thr Arg Thr Gly Asp Thr Phe Ile Pro Leu Tyr
                            120
                                                 125
Asp Arg Val Glu Ile Ala His Lys His Gly Ala Asp Leu Phe Met Ser
                        135
                                             140
Ile His Ala Asp Gly Phe Thr Asn Pro Ser Ala Ala Gly Ala Ser Val
                    150
                                        155
Phe Ala Leu Ser Asn Arg Gly Ala Ser Ser Ala Met Ala Lys Tyr Leu
                                    170
                165
Ser Asp Arg Glu Asn Arg Ala Asp Glu Val Ala Gly Lys Lys Ala Thr
                                185
                                                     190
            180
Asp Lys Asp His Leu Leu Gln Gln Val Leu Phe Asp Leu Val Gln Thr
                            200
                                                 205
Asp Thr Ile Lys Asn Ser Leu Thr Leu Gly Ser His Ile Leu Lys Arg
```

 Ile
 Lys
 Pro
 Val
 His
 Arg
 Leu
 His
 Ser
 Lys
 Ser
 Thr
 Glu
 Glu
 Ala
 Ala
 240

 Phe
 Val
 Val
 Leu
 Lys
 Ser
 Pro
 Ser
 Ile
 Pro
 Ser
 Val
 Leu
 Val
 Glu
 Thr
 Arg
 Leu
 Leu
 Leu
 Val
 Thr
 Thr
 Ala
 Ala
 Ile
 Ala
 Ile
 Ala
 Ile
 Ala
 Ile
 Ala
 Ser
 Gly
 Val
 Ile
 Ser
 Tyr

 Phe
 Asn
 Trp
 Phe
 Asp
 Asn
 Gln
 Lys
 Ala
 His
 Ser
 Arg
 Lys
 Arg

 Phe
 Asn
 Trp
 Phe
 Asp
 Asn
 Gln
 Lys
 Ala
 His
 Ser
 Arg
 Lys
 Arg

 Phe
 Asn
 Trp
 Phe
 Asp
 Asn
 Gln
 Lys
 Ala
 His
 Ser
 Arg
 Lys
 Arg

 290
 Lys
 Lys
 A

<210> 10103

<211> 664

<212> PRT

<213> Enterobacter cloacae

<400> 10103

Thr Met Ser Arg Lys Glu Leu Ala Asn Ala Ile Arg Ala Leu Ser Met 10 Asp Ala Val Gln Lys Ala Asn Ser Gly His Pro Gly Ala Pro Met Gly 20 25 Met Ala Asp Ile Ala Glu Val Leu Trp Asn Asp Phe Leu Lys His Asn 35 40 Pro Thr Asp Pro Thr Trp Tyr Asp Arg Asp Arg Phe Ile Leu Ser Asn 55 60 Gly His Ala Ser Met Leu Leu Tyr Ser Leu Leu His Leu Ser Gly Tyr 70 75 Asp Leu Pro Leu Glu Glu Leu Lys Asn Phe Arg Gln Leu His Ser Lys 85 90 Thr Pro Gly His Pro Glu Ile Gly Tyr Thr Pro Gly Val Glu Thr Thr 105 100 Thr Gly Pro Leu Gly Gln Gly Leu Ala Asn Ala Val Gly Leu Ala Ile 120 125 Ala Glu Arg Thr Leu Ala Ala Gln Phe Asn Gln Pro Asp His Glu Ile 135 Val Asp His Tyr Thr Tyr Val Phe Met Gly Asp Gly Cys Leu Met Glu . 150 155 Gly Ile Ser His Glu Val Cys Ser Leu Ala Gly Thr Leu Gly Leu Gly 170 Lys Leu Ile Gly Phe Tyr Asp His Asn Gly Ile Ser Ile Asp Gly Glu 185 Thr Glu Gly Trp Phe Thr Asp Asp Thr Ala Lys Arg Phe Glu Ala Tyr 200 195 His Trp His Val Val His Glu Ile Asp Gly His Asp Pro Glu Ala Val 215 220 Lys Lys Ala Ile Gln Glu Ala Gln Ser Val Lys Asp Lys Pro Ser Leu 230 235 Ile Ile Cys Arg Thr Thr Ile Gly Phe Gly Ser Pro Asn Lys Ala Gly 250 245 Lys Glu Glu Ala His Gly Ala Ala Leu Gly Glu Glu Val Ala Leu 265 270 Thr Arg Gln Lys Leu Gly Trp Lys His Pro Ala Phe Glu Ile Pro Lys 280 285 Glu Ile Tyr Lys Ala Trp Asp Ala Arg Glu Thr Gly Glu Lys Ala Gln 295 300 Gln Ala Trp Asn Glu Lys Phe Ala Ala Tyr Lys Lys Ala Tyr Pro Asp 310 315 Leu Ala Ala Glu Phe Thr Arg Arg Met Ser Gly Gly Leu Pro Glu Asp 325 330 Trp Glu Glu Lys Thr Gln Ala Leu Ile Glu Asn Leu Gln Ser Asn Pro 340 345

```
Ala Lys Ile Ala Thr Arg Lys Ala Ser Gln Asn Thr Leu Asn Ala Ile
                           360
Gly Pro Ile Leu Pro Glu Leu Leu Gly Gly Ser Ala Asp Leu Ala Pro
                        375
                                            380
Ser Asn Leu Thr Ile Trp Ser Gly Ser Lys Ser Leu Lys Glu Asp Ile
                    390
                                        395
Ala Gly Asn Tyr Ile His Tyr Gly Val Arg Glu Phe Gly Met Thr Ala
                                    410
Ile Ala Asn Gly Ile Ala His His Gly Gly Phe Val Pro Tyr Thr Ala
            420
                                425
Thr Phe Leu Met Phe Val Glu Tyr Ala Arg Asn Ala Ala Arg Met Ala
                            440
Ala Leu Met Lys Ala Arg Gln Ile Met Val Tyr Thr His Asp Ser Ile
                        455
                                            460
Gly Leu Gly Glu Asp Gly Pro Thr His Gln Ala Val Glu Gln Leu Ala
                    470
                                        475
Ser Leu Arg Leu Thr Pro Asn Phe Ser Thr Trp Arg Pro Cys Asp Gln
                485
                                    490
Val Glu Ala Ala Val Gly Trp Lys Leu Ala Val Glu Arg His Asn Gly
            500
                                505
Pro Thr Ala Leu Ile Leu Ser Arg Gln Asn Leu Ala Gln Ile Glu Arg
                            520
Thr Pro Glu Gln Val Lys Asn Ile Ala Arg Gly Gly Tyr Ile Leu Lys
                        535
                                            540
Asp Ser Gly Gly Lys Pro Asp Val Ile Leu Ile Ala Thr Gly Ser Glu
                    550
                                        555
Val Glu Ile Thr Val Lys Ala Ala Glu Lys Leu Thr Ala Glu Gly His
                565
                                    570
                                                        575
Ala Val Arg Val Val Ser Leu Pro Ser Thr Asp Ile Phe Asp Ala Gln
                                585
                                                     590
            580
Asp Glu Ala Tyr Arg Glu Ser Val Leu Pro Ser Asn Val Ala Ala Arg
        595
                            600
                                                605
Val Ala Val Glu Ala Gly Ile Ala Asp Tyr Trp Tyr Lys Tyr Val Gly
                        615
                                            620
Leu Lys Gly Ala Ile Val Gly Met Lys Gly Tyr Gly Glu Ser Ala Pro
                    630
                                        635
Ala Asp Lys Leu Phe Pro Tyr Phe Gly Phe Thr Val Glu Asn Val Val
                645
                                    650
Glu Lys Ala Leu Ser Val Leu
            660
```

<210> 10104

<211> 565

<212> PRT

<213> Enterobacter cloacae

<400> 10104

 Val
 Thr
 Val
 Lys
 Arg
 Pro
 Val
 Ser
 Gly
 Ser
 Leu
 Ala
 Arg
 Ala
 Phe
 Phe

 Ser
 Met
 Ile
 Val
 Leu
 Ser
 Val
 Leu
 Ile
 Ser
 Ala
 Ile
 Ala
 Leu
 Val
 Thr
 30

 Leu
 Ala
 Ser
 Ser
 Gln
 Arg
 Asp
 Ala
 Glu
 Ala
 Ile
 Ala
 Gly
 Ser

 Leu
 Arg
 Met
 Gln
 Ser
 Tyr
 Arg
 Leu
 Gly
 Tyr
 Glu
 Met
 Gln
 Arg
 Ala
 Ser

 Leu
 Arg
 Ala
 Glu
 His
 Arg
 Ala
 Val
 Trp
 Gln
 Lys
 Thr
 Leu
 Ser
 Ala

 Pro
 Ala
 Leu
 Gln
 Lys
 Leu
 Asn
 Arg
 Trp
 Tyr
 Val
 Pro
 Glu
 Asp
 <

Ile Ala Ser Gly Asp Thr Gly Trp Tyr Gln Asn His Ile Glu Asp Phe 115 120 Val Gly Arg Ile Asp Ala Phe Val Leu Ala Leu Gln His Tyr Thr Glu 135 140 His Lys Ile Gln Leu Val Ile Cys Met Ser Leu Thr Gly Gly Leu Gly 150 155 Ile Leu Leu Ala Val Val Thr Leu Arg Arg Ile Arg Arg Gln Val 165 170 Val Leu Pro Leu Asn Asn Leu Val Ala Ala Ser Glu Arg Ile Glu Gln 180 185 Gly Gln Phe Asp Thr Pro Ala Pro Asp Thr Thr Leu Pro Asn Glu Leu 200 Gly Gln Leu Ser Arg Ala Phe Asn His Met Ser Ala Glu Leu His Thr 215 Leu Tyr Arg Ser Leu Glu His Ser Val Ala Glu Lys Thr Arg His Leu 230 235 Asn Glu Ala His Gln Gln Leu Glu Met Leu Phe Lys Cys Ser Gln Ala 245 250 Leu Asn Thr Gly Gln Ile Asp Ser His Cys Phe Arg His Ile Leu Gln 260 265 Ile Val His Asp Tyr Thr Gln Met Asn Tyr Leu Gln Leu Arg Thr Ser 280 Asp Asp Trp Gln Leu Tyr Glu Gly Leu Glu Thr Pro Gly Glu Lys Met 295 300 His Asn Leu Pro Val Leu Met Gln Asp Thr Leu Tyr Gly Glu Leu Arg 310 315 Trp Gln Ser Ala Thr Gly Asp Val Pro Leu Pro Leu Met Glu Ser Val 325 330 Ala Thr Met Leu Gly Arg Gly Leu Tyr Phe Asn Gln Ala Gln Lys His 340 345 Tyr Gln Gln Leu Leu Met Glu Glu Arg Ala Thr Ile Ala Arg Glu 360 Leu His Asp Ser Leu Ala Gln Val Leu Ser Tyr Leu Arg Ile Gln Leu 375 380 Thr Leu Leu Lys His Ala Val Pro Gly Asp Asn Ala Pro Ala Gln Ala 390 395 Ile Ile Thr Asp Phe Ser Arg Glu Leu Asn Asn Ala Trp His Gln Leu 405 410 Arg Glu Leu Leu Thr Thr Phe Arg Leu Thr Leu Asn His Ala Asn Leu 420 425 Pro Ala Ala Leu Gln Glu Ser Leu Asp Gly Leu Gln Ser Gln Thr Ser 440 Ala Lys Leu Val Leu Asp Cys Arg Leu Ser Ser Leu Ala Leu Asp Ala 455 Gln Lys Gln Val His Leu Leu Gln Ile Val Arg Glu Ala Val Leu Asn 470 475 Ala Ile Lys His Ala Asp Ala Ser Glu Ile Val Val Ser Cys Val Thr 490 Thr Ala Asp Gly Thr His Thr Val Thr Ile Arg Asp Asn Gly Ile Gly 505 Ile Gly Asp Ala Ser Glu Pro Pro Gly His Tyr Gly Leu Asn Ile Met 520 525 Arg Glu Arg Ala Gly Arg Leu Gly Gly Thr Leu His Phe Ser Gln Pro 535 540 Pro Gln Gly Gly Thr Gln Val Ser Val Thr Phe Arg Thr Pro Ala Ala 550 555 Gln Ala Glu Lys

<212> PRT <213> Enterobacter cloacae

<400> 10105 Arg Ala Ala Lys Arg Gly His Thr Leu Met Ala Asn Phe Phe Ile Asp Arg Pro Ile Phe Ala Trp Val Leu Ala Ile Leu Leu Cys Leu Thr Gly 25 Val Leu Ala Ile Thr Ser Leu Pro Val Glu Gln Tyr Pro Asp Leu Ala Pro Pro Asn Val Arg Ile Thr Ala Asn Tyr Pro Gly Ala Ser Ala Gln 5.5 Thr Leu Glu Asn Thr Val Thr Gln Val Ile Glu Gln Asn Met Thr Gly 75 70 Leu Asp Asn Leu Met Tyr Met Ser Ser Gln Ser Ser Ala Thr Gly Gln 90 Ala Thr Val Thr Leu Ser Phe Thr Ala Gly Thr Asp Pro Asp Glu Ala 105 100 Val Gln Gln Val Gln Asn Gln Leu Gln Ser Ala Leu Arg Lys Leu Pro 120 Gln Ala Val Gln Asn Gln Gly Val Thr Val Arg Lys Thr Gly Asp Thr 140 135 Asn Ile Leu Thr Ile Ala Phe Val Ser Thr Asp Gly Ser Met Asp Lys 150 155 Gln Asp Ile Ala Asp Tyr Val Ala Ser Asn Ile Gln Asp Pro Leu Ser 165 170 Arg Ile Asn Gly Val Gly Asp Ile Asp Ala Tyr Gly Ser Gln Tyr Ser 180 185 Met Arg Ile Trp Leu Asp Pro Asn Lys Leu Asn Ser Val Gln Met Thr 200 Ala Lys Asp Val Thr Asp Ala Ile Glu Ser Gln Asn Ala Gln Ile Ala 215 Val Gly Gln Leu Gly Gly Thr Pro Ser Val Asp Asn Gln Ala Leu Asn 230 235 Ala Thr Ile Asn Ser Gln Ser Leu Leu Gln Thr Pro Asp Gln Phe Arg 245 250 Asn Ile Thr Leu Arg Val Asn Gln Asp Gly Ser Glu Val Arg Leu Gly 265 270 Asp Val Ala Thr Val Glu Met Gly Ala Glu Lys Tyr Asp Tyr Leu Ser 280 Arg Phe Asn Gly Asn Ala Ala Ser Gly Leu Gly Val Lys Leu Ala Ser 295 Gly Ala Asn Glu Met Ala Thr Ala Gln Arg Val Leu Glu Arg Leu Asp 310 Glu Leu Ser His Tyr Phe Pro His Gly Leu Glu Tyr Lys Val Ala Tyr 330 Glu Thr Thr Ser Phe Val Lys Ala Ser Ile Glu Asp Val Val Lys Thr 345 Leu Leu Glu Ala Ile Ala Leu Val Phe Leu Val Met Tyr Leu Phe Leu 360 Gln Asn Phe Arg Ala Thr Leu Ile Pro Thr Ile Ala Val Pro Val Val 375 Leu Leu Gly Thr Phe Ala Val Leu Tyr Ala Phe Gly Tyr Ser Ile Asn 395 390 Thr Leu Thr Met Phe Ala Met Val Leu Ala Ile Gly Leu Leu Val Asp 410 405 Asp Ala Ile Val Val Val Glu Asn Val Glu Arg Ile Met Ser Glu Glu 425 430 Gly Leu Ser Pro Arg Glu Ala Thr Arg Lys Ser Met Gly Gln Ile Gln 440 Gly Ala Leu Val Gly Ile Ala Met Val Leu Ser Ala Val Phe Ile Pro

455 460 Met Ala Phe Phe Gly Gly Thr Thr Gly Ala Ile Tyr Arg Gln Phe Ser 470 475 Ile Thr Ile Val Ser Ala Met Val Leu Ser Val Leu Val Ala Met Ile 485 490 Leu Thr Pro Ala Leu Cys Ala Thr Leu Leu Lys Pro Leu His Lys Gly 505 Glu His His Gly Gln Lys Gly Phe Phe Gly Trp Phe Asn Arg Met Phe 520 Asn Arg Asn Ala Ala Arg Tyr Glu Ala Gly Val Gly Lys Val Leu His 535 Arg Ser Val Arg Trp Met Val Val Tyr Val Leu Leu Gly Gly Met 550 555 Val Phe Leu Phe Leu Arg Leu Pro Thr Ser Phe Leu Pro Leu Glu Asp 565 570 Arg Gly Met Phe Ile Thr Ser Val Gln Leu Pro Ser Gly Ser Thr Gln 585 Gln Gln Thr Leu Lys Val Val Gln Lys Val Glu Asn Tyr Phe His Thr 600 Gln Glu Lys Asp Asn Val Val Ser Val Phe Ser Thr Val Gly Ser Gly 615 620 Pro Gly Gly Asn Gly Gln Asn Val Ala Arg Met Phe Val Arg Leu Lys 630 635 Asp Trp Asp Gln Arg Asp Ser Asp Thr Gly Ser Ser Phe Ala Ile Ile 645 650 Glu Arg Ala Thr Lys Ala Phe Asn Lys Ile Lys Glu Ala Arg Val Phe 665 670 Ala Ser Ser Pro Pro Ala Ile Ser Gly Leu Gly Ser Ser Ala Gly Phe 680 Asp Met Glu Leu Gln Asp His Ala Gly Ala Gly His Asp Ala Leu Met 690 695 700 Ala Ala Arg Asp Lys Leu Leu Glu Leu Ala Gly Lys Asp Pro Gln Leu 710 715 Thr Arg Val Arg His Asn Gly Leu Asp Asp Ser Pro Gln Leu Gln Val 725 730 Asp Ile Asp Gln Arg Lys Ala Gln Ala Leu Gly Val Ser Ile Asp Asp 745 Ile Asn Asp Thr Leu Gln Thr Ala Trp Gly Ser Ser Tyr Val Asn Asp 760 Phe Met Asp Arg Gly Arg Val Lys Lys Val Tyr Val Gln Ser Ala Ala 775 Lys Tyr Arg Met Leu Pro Asp Asp Ile Asn Arg Trp Tyr Val Arg Asn 790 795 Asn Thr Gly Gly Met Val Pro Phe Ser Ala Phe Ala Thr Ser Arg Trp 805 810 Glu Thr Gly Ser Pro Arg Leu Glu Arg Tyr Asn Gly Tyr Ser Ala Leu 825 Glu Ile Val Gly Glu Ala Ala Pro Gly Val Ser Thr Gly Thr Ala Met 840 845 Asp Ile Met Glu Lys Leu Val Gln Gln Leu Pro Thr Gly Phe Gly Leu 855 860 Glu Trp Thr Ala Met Ser Tyr Gln Glu Arg Leu Ser Gly Ala Gln Ala 870 875 Pro Ala Leu Tyr Ala Leu Ser Leu Leu Val Val Phe Leu Cys Leu Ala 885 890 Ala Leu Tyr Glu Ser Trp Ser Val Pro Phe Ser Val Met Leu Val Val 900 905 Pro Leu Gly Val Ile Gly Ala Leu Leu Ala Thr Trp Met Arg Gly Leu 920 925 Glu Asn Asp Val Tyr Phe Gln Val Gly Leu Leu Thr Val Ile Gly Leu 935 940

Ser Ala Lys Asn Ala Ile Leu Ile Val Glu Phe Ala Asn Glu Met Asn 950 955 Ala Lys Gly His Glu Leu Met Ala Ala Thr Leu His Ala Cys Arg Gln 965 970 Arg Leu Arg Pro Ile Leu Met Thr Ser Leu Ala Phe Val Phe Gly Val 980 985 Leu Pro Met Ala Thr Ser Ser Gly Ala Gly Ser Ser Gln His Ala 1000 Val Gly Thr Gly Val Met Gly Gly Met Ile Ser Ala Thr Ile Leu Ala 1015 1020 Ile Tyr Phe Val Pro Leu Phe Phe Val Leu Ile Arg Arg Phe Pro 1030 1035 Leu Lys Asp Lys Pro Glu 1045

<210> 10106 <211> 158 <212> PRT

<213> Enterobacter cloacae

<400> 10106

Val Met Asn Pro Leu Lys Ala Gly Asp Ile Ala Pro Lys Phe Ser Leu 10 Pro Asp Gln Asp Gly Glu Gln Val Asn Leu Thr Asp Phe Gln Gly Gln 20 Arg Val Leu Val Tyr Phe Tyr Pro Lys Ala Met Thr Pro Gly Cys Thr Val Gln Ala Cys Gly Leu Arg Asp Asn Met Asp Glu Leu Lys Lys Val 55 Gly Val Glu Val Leu Gly Ile Ser Thr Asp Lys Pro Glu Lys Leu Ser 75 70 Arg Phe Ala Glu Lys Glu Leu Leu Asn Phe Thr Leu Leu Ser Asp Glu 85 90 Asp His Gln Val Cys Glu Gln Phe Gly Val Trp Gl'y Glu Lys Ser Phe 100 105 110 Met Gly Lys Thr Tyr Asp Gly Ile His Arg Ile Ser Phe Leu Ile Gly 115 120 Ala Asp Gly Lys Val Glu His Val Phe Asp Asp Phe Lys Thr Ser Asn 135 His His Asp Val Val Leu Lys Trp Leu Lys Glu Asn Ala

<210> 10107 <211> 544 <212> PRT

<213> Enterobacter cloacae

150

<400> 10107

Leu Ser Gln Lys Arg Leu Ser Phe Leu Phe His Cys Gln Val Ser Gln 10 Asn Pro Asp Glu Trp Asp Phe Leu His Leu Leu Thr Arg Leu His Ser 25 Gln Ser Ser Gly Asp Glu Arg Tyr Ala Gly Ser Ser Val Lys Leu Ala 40 45 His Pro Lys Tyr Arg Thr Val Val Met Phe Arg Gln Leu Arg Lys Thr 55 60 Leu Val Ala Thr Leu Ile Ala Ala Val Thr Val Gly Gln Val Leu Pro 70 75 Ala Phe Ala Asp Ser Ser Asp Ser Leu Pro Asp Met Gly Thr Thr Ala 90 Gly Ser Thr Leu Ser Ile Gly Gln Glu Met Gln Met Gly Asp Tyr Tyr

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100
                               105
                                                   110
Val Arg Gln Leu Arg Gly Ser Ala Pro Leu Ile Asn Asp Pro Leu Leu
                    120
                                              125
Val Gln Tyr Ile Asn Gly Leu Gly Met Arg Leu Val Ala His Ala Asp
                      135
                                           140
Ser Val Lys Thr Pro Phe His Phe Tyr Leu Ile Asn Asn Asp Glu Ile
                   150
                                      155
Asn Ala Phe Ala Phe Phe Gly Gly Asn Val Leu His Ser Ala Leu
               165
                                   170
Phe Arg Tyr Ser Asp Asn Glu Ser Gln Leu Ala Ser Val Met Ala His
                              185
Glu Ile Ser His Val Thr Gln Arg His Leu Ala Arg Ala Met Glu Asp
                           200
Gln Lys Arg Asn Ala Pro Leu Thr Trp Val Gly Ala Leu Gly Ser Ile
                       215
                                           220
Leu Leu Ala Met Ala Ser Pro Gln Ala Gly Met Ala Ala Leu Thr Gly
                   230
                                       235
Thr Leu Ala Gly Thr Arg Gln Gly Met Ile Ser Phe Thr Gln Gln Asn
               245
                                   250
Glu Gln Glu Ala Asp Arg Ile Gly Ile Gln Val Leu Gln Arg Ser Gly
           260
                               265
Phe Asp Pro Gln Ala Met Pro Ser Phe Leu Glu Lys Leu Leu Asp Gln
       275
                           280
Ala Arg Tyr Ser Ser Arg Pro Pro Glu Ile Leu Leu Thr His Pro Leu
                       295
                                           300
Pro Glu Ser Arg Leu Ser Asp Ala Arg Asn Arg Ala Asn Gln Met Arg
                   310
                                       315
Pro Val Val Val Gln Ser Ser Gln Asp Phe Tyr Met Ala Lys Val Arg
                                   330
               325
Thr Leu Gly Met Tyr Asn Ser Gly Arg Asn Gln Leu Thr Ser Asp Leu
           340
                               345
Leu Asp Ala Leu Ala Lys Gly Asn Val Arg Glu Lys Asn Ala Ala Gln
       355
                           360
Tyr Gly Gln Ala Leu Gln Ala Met Glu Ala Ser Lys Tyr Asp Glu Ala
                       375 . 380
   370
Arg Lys Ala Leu Gln Pro Leu Leu Ala Ser Ala Pro Asp Asn Pro Trp
                   390
                                       395
Tyr Leu Asp Leu Ala Thr Asp Ile Asp Leu Gly Gln Lys Lys Ala Thr
               405
                                   410
Asp Ala Ile Asn Arg Leu Lys Gly Ala Lys Asp Ile Arg Asn Asn Pro
           420
                               425
Val Leu Gln Leu Asn Leu Ala Asn Ala Tyr Leu Gln Gly Gly Gln Pro
                           440
Gly Glu Ala Val Thr Ile Leu Asn Arg Tyr Thr Phe Asn Asn Lys Asp
                       455
Asp Gln Asn Gly Trp Glu Leu Leu Ala Gln Ala Gln Gly Gln Leu Gly
                   470
                                       475
Asn Arg Asp Gln Glu Leu Ala Ala Arg Ala Glu Gly Leu Ala Leu Ala
                                   490
Gly Arg Leu Glu Gln Ala Ile Ser Leu Leu Ser Ser Ala Ser Ser Gln
                               505
Val Lys Leu Gly Ser Leu Gln Gln Ala Arg Tyr Asp Ala Arg Ile Asp
                           520
Gln Leu Arg Gly Leu Gln Gln Arg Phe Lys Pro Tyr Glu Lys Met
                       535
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<sup>&</sup>lt;210> 10108

<sup>&</sup>lt;211> 469

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<400> 10108 Pro Ile Ser Pro Phe Ala Arg Arg Ala Ser Leu Ile Ile His Arg His 10 Asn Ile Asn Asn Thr Ser Gln Ser Cys Thr Glu Phe Thr Met Asn Asn 20 25 Val Leu Gly Phe Leu Glu Ala Lys Leu Met Pro Leu Ala Ala Lys Thr 40 Ala Gln Gln Arg His Leu Gly Ala Ile Arg Gly Ala Tyr Val Ser Phe 55 Met Pro Phe Ile Ile Val Gly Ser Ile Leu Leu Val Ile Ser Ser Phe 75 70 Pro Asn Gln Ala Tyr Gln Gln Phe Met Ser Gln Ala Phe Gly Glu Ser 85 90 Trp Ser Ala Ile Ile Glu Ile Pro Phe Asn Ala Val Phe Ser Thr Met 100 105 Ser Leu Phe Ile Ser Phe Leu Val Ala Tyr Arg Leu Ala Glu His Tyr 120 Gly Glu Asp Arg Ile Ser Cys Gly Ile Leu Ala Leu Val Ala Phe Leu 135 140 Ile Leu Thr Pro Phe Ile Lys Val Ala Glu Asn Gly Gly Ile Thr Val 150 155 Met Pro Val Glu Trp Ile Gly Ser Lys Gly Leu Phe Val Ala Met Ile 170 165 Gly Ser Leu Leu Trp Thr Glu Leu Phe Cys Trp Leu Lys Arg Lys Lys 180 185 190 Leu Val Ile Lys Met Pro Asp Gly Val Pro Pro Ala Val Gln Glu Ser 200 205 Phe Ala Ala Leu Ile Pro Ala Leu Leu Val Met Ile Leu Val Leu Leu 215 220 Ile Arg Ile Ile Phe Glu Asn Thr His Tyr His Thr Ile His Gln Phe 230 235 Ile Tyr Glu Val Val Ala Thr Pro Val Arg His Tyr Gly Thr Ser Tyr 245 250 Phe Gly Ala Leu Met Thr Val Phe Ser Ile Thr Ile Leu Trp Ser Val 260 265 270 Gly Ile Asn Ser Gly Ser Met Ile Asn Gly Ile Ile Arg Pro Leu Trp 280 Met Glu Asn Gln Thr Asp Asn Ile Ala Ala Ile Gln Ala Gly Thr Thr 295 Pro Pro His Ile Ile Thr Glu Gln Phe Phe Asp Met Ile Trp Met Gly 315 310 Gly Ala Gly Ala Thr Leu Ser Leu Val Ile Ala Met Leu Ile Phe Ala 330 Arg Ser Lys Asn Met Arg Glu Val Ala Arg Leu Gly Ala Gly Ala Ser 345 Val Phe Asn Ile Asn Glu Pro Ile Leu Phe Gly Leu Pro Val Ile Met 360 Asn Pro Ile Met Leu Ile Pro Phe Asn Leu Val Pro Leu Val Leu Val 375 380 Thr Val Gln Tyr Ala Ala Met Lys Ile Gly Ala Val Ala Val Thr Thr 390 395 Gly Val Phe Ile Pro Trp Thr Leu Pro Pro Val Ile Ser Gly Phe Ile 405 410 Val Thr Gly His Leu Ser Gly Ser Val Met Gln Leu Ile Asn Leu Leu 420 425 Ile Gly Ala Met Leu Tyr Leu Pro Phe Met Arg Ile Leu Asp Lys Gln 440 445 Tyr Arg Ala Ala Glu Ile Ala Ser Val Thr Gln Thr Asp Thr Thr Leu 455 Ala Lys Gln Glu 465

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<210> 10109
<211> 320
<212> PRT
<213> Enterobacter cloacae
<400> 10109
Ser Met Trp Gly Ile Ile Ala Thr Trp Arg Met Ala Leu Glu Gly Val
Thr Glu Ser Ala Ser Ala Leu Ala Ala Gly Lys Pro Val Ala Ala Ala
            20
Val Val Asp Ala Val Ala Ala Val Glu Asp Phe Pro Leu Tyr Lys Ser
Val Gly Tyr Gly Gly Leu Pro Thr Glu Asn Gly Glu Val Glu Leu Asp
Ala Ala Tyr Met Asp Gly Asp Thr Leu Ala Phe Gly Ala Val Gly Asn
                    70
Leu Val Asp Ile Ala Asn Pro Val Arg Val Ala His Ala Leu Ser Arg
                85
                                     90
Gln Arg Tyr Asn Ser Leu Leu Val Gly Gln Gly Ala Arg Glu Trp Ala
            100
                                 105
                                                     110
Leu Ser Gln Gly Phe Ala Asp Lys Thr Met Leu Thr Asp Arg Ala Met
                            120
                                                 125
Gln His Tyr Arg Lys Arg Cys Arg Glu Thr Leu Asp Lys Gly Leu Ser
                        135
                                             140
Pro Tyr Asp Gly His Asp Thr Val Gly Ile Ile Gly Leu Asp Lys Gln
                    150
Gly Ser Met Ser Val Ala Thr Ser Thr Ser Gly Leu Phe Met Lys Lys
                                     170
Arg Gly Arg Leu Gly Asp Ser Pro Ile Ile Gly Ser Gly Phe Tyr Cys
                                 185
Asp Ser Glu Thr Gly Ala Ala Thr Ala Thr Gly Val Gly Glu Asp Leu
                             200
Met Lys Gly Cys Thr Ser Tyr Glu Ile Val Arg Arg Met Ala Gln Gly
                        215
                                             220
Met Thr Pro Gln Gln Ala Ala Asp Ser Val Val Phe Glu Leu Glu Asp
                    230
Lys Leu Met Ser Arg Phe Gly Arg Ala Gly Asp Leu Ser Val Val Cys
                245
                                     250
Met Asn Ser Lys Gly Glu Phe Gly Ala Ala Thr Asn Ile Lys Thr Phe
                                 265
                                                     270
Ser Phe Val Val Ala Thr Ala Arg Gln Pro Leu Thr Val Phe Arg Thr
                            280
Glu Arg Leu Arg Glu Lys Thr His Tyr His Ala Val Asp Asp Glu Trp
                        295
                                             300
Met Gln Ala Tyr Ala Ala Arg Ile Arg Ala Pro Ile Glu Glu Leu
                                                             320
                    310
                                         315
<210> 10110
<211> 243
<212> PRT
<213> Enterobacter cloacae
<400> 10110
Tyr Arg Phe Phe Phe Ser Cys Ser Ser Cys Thr Val Asp Thr Val Thr
                                     10
Asn Val Lys Ile Leu Leu Ile Glu Asp Asp Leu Asp Leu Gly Asn Gly
                                 25
Val Arg Ile Ala Leu Ala Asp Gln Gly Phe Asp Val Ile Trp Val Arg
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Arg Lys Glu Asp Ala Leu His Gln Leu Gly Ile Cys Val Pro Glu Leu

55 Ile Leu Leu Asp Leu Gly Leu Pro Asp Gly Asp Gly Met Ser Leu Met 70 75 Thr Arg Leu Arg Gln Gln Leu Lys Gly Val Pro Val Ile Ile Leu Thr 85 90 Ala Arg Gly Thr Leu Gln Asp Arg Leu Cys Gly Leu Asp Ala Gly Ala 105 Asp Asp Tyr Leu Val Lys Pro Phe Val Leu Ala Glu Leu Leu Ala Arg 120 Val Arg Ala Leu Ala Arg Arg Ser Tyr Gly Phe Glu Asn Glu Ala Ile 135 140 Glu Ile Arg Gly Leu Ser Leu His Ile Pro Thr Arg Arg Val Thr Val 150 155 Ser Ala Arg His Val Glu Leu Thr Ala Ser Glu Tyr Ala Leu Leu Glu 165 170 Thr Leu Met Leu Arg Ala Asp Arg Val Leu Thr Arg Arg Tyr Leu Glu 180 185 Glu Arg Leu Phe Gly Thr Lys Glu Asn Leu Ser Asn Ala Leu Asp Val 200 His Met Gly Asn Leu Arg Arg Lys Ile Gly Asp Gly Phe Val Arg Thr 215 220 Vàl Arg Gly Val Gly Tyr Val Ile Asp Thr Val Pro Val Gln Lys Ala 230 235 Ala Gly

<210> 10111

<211> 333

<212> PRT

<213> Enterobacter cloacae

<400> 10111

Ile Ser Pro Arg Phe Ser Ala Phe Ile Ser Leu Thr Ser Leu Ile Met 10 Gly Ile Ser Phe Leu Asp Ser Arg Glu Gln Gly Arg Leu Ser Ser Phe 25 Ile Arq His Lys Asp Leu Gln Lys Met Asn Asn His Phe Arq Cys Ile 40 Gly Ile Val Gly His Pro Arg His Pro Thr Ala Leu Thr Thr His Glu 55 Met Leu Tyr Arg Trp Leu Cys Gly Lys Gly Tyr Glu Val Met Val Glu 70 75 Gln Gln Ile Ala Gln Glu Leu Gln Leu Lys Ser Val Arg Thr Gly Thr 90 Leu Ala Glu Ile Gly Gln Gln Ala Asp Leu Ala Val Val Gly Gly 105 Asp Gly Asn Met Leu Gly Ala Ala Arg Thr Leu Ala Arg Tyr Asp Ile 120 125 Lys Val Ile Gly Val Asn Arg Gly Asn Leu Gly Phe Leu Thr Asp Leu 135 140 Asp Pro Asp Asn Ala Gln Gln Leu Ala Asp Val Leu Glu Gly His 150 155 Tyr Ile Ser Glu Lys Arg Phe Leu Leu Glu Ala Gln Val Cys Gln Gln 165 170 Asp Cys Gln Lys Arg Ile Ser Thr Ala Ile Asn Glu Val Val Leu His 185 180 190 Pro Gly Lys Val Ala His Met Ile Glu Phe Glu Val Tyr Ile Asp Glu 200 205 195 Ile Phe Ala Phe Ser Gln Arg Ser Asp Gly Leu Ile Ile Ser Thr Pro 215 220

Thr Gly Ser Thr Ala Tyr Ser Leu Ser Ala Gly Gly Pro Ile Leu Thr

230 235 Pro Ser Leu Asp Ala Ile Thr Leu Val Pro Met Phe Pro His Thr Leu 245 250 Ser Ala Arg Pro Leu Val Ile Asn Gly Asp Ser Thr Ile Arg Leu Arg 265 260 270 Phe Ser His Arg Arg Ser Asp Leu Glu Ile Ser Cys Asp Ser Gln Ile 280 285 Ala Leu Pro Ile Gln Glu Gly Glu Asp Val Leu Ile Arg Arg Cys Asp 295 300 Tyr His Leu Asn Leu Ile His Pro Lys Asp Tyr Ser Tyr Phe Asn Thr 315 310 Leu Ser Ser Lys Leu Gly Trp Ser Lys Lys Leu Phe

<210> 10112

<211> 430

<212> PRT

<213> Enterobacter cloacae

<400> 10112

Thr Ser Ser Leu Thr Gly Tyr Asn Pro Leu Ile Leu Lys Arg Phe Lys 10 Thr Met Phe Gln Ala Leu Leu Arg Arg Glu Ala Arg Leu Phe Phe 20 25 Ile Ile Ser Ile Leu Phe Phe Ile Cys Ile His Ser Ile Asp Ala Phe 35 40 Leu Ala Pro Met Met Ile Asn Gln Gly Ile Glu Pro Gln Ile Met Gly 55 Ile Ile Met Gly Ala Ser Gly Leu Ala Thr Leu Leu Ile Arg Phe Pro 70 75 Leu Gly Ile Ile Ser Asp Val Val Lys Ser Arg Arg Ile Phe Ile Gln 8.5 90 Ile Gly Leu Leu Pro İle Ile Ala Trp Pro Ile Ala Trp Leu Glu 100 105 Pro Asn Ala Ile Thr Leu Tyr Leu Ala Lys Ala Ala Asp Gly Val Thr 120 125 115 Ala Ala Thr Trp Val Leu Tyr Asn Ile Leu Phe Met Arg Tyr Phe Gly 135 140 Arg Asn Glu Ala Pro Ala Ala Val Ala Leu Leu Ala Leu Ala Gly Pro 150 155 Ile Gly Val Phe Leu Gly Asn Cys Ile Gly Ala Val Leu Ile His Tyr 170 165 175 Phe Ala Asn Asn Ile Ala Phe Phe Val Ser Cys Ile Ser Ala Leu Val 180 185 190 Ala Leu Ile Leu Thr Thr Arg Ile Gln Asp Val His Asp Pro Val Gln 200 205 Ala Pro Thr Leu Lys Ala Cys Ile Thr Gly Ala Arg Gln Gln Leu Ala 215 220 Asp Arg Ser Val Trp Leu Ile Gly Ile Leu Ala Thr Val Val Ile Leu 230 Val Pro Phe Ala Thr Arg Asp Thr Leu Thr Pro Val Tyr Ala Glu Gln 245 250 Leu Gly Ala Arg Ala Gly Ile Leu Ala Leu Leu Gly Asn Ile His Leu 265 260 Leu Phe Tyr Gly Leu Ala Ile Ala Leu Cys Ser Ser Val Phe Tyr Gln 280 Arg Leu Gly Leu Val Lys Thr Ala Val Leu Gly Ile Val Leu Gln Val 295 300 Ile Ser Thr Phe Gly Ile Pro Phe Thr Ser Asn Met Tyr Val Ile Tyr 310 315 Leu Trp Gln Ala Leu Ala Gly Phe Ser Phe Gly Met Ala Phe Ala Ala

325 330 Phe Met Ser Leu Ser Val Val Asn Thr Ser Ser Asp Glu Gln Ser Thr 340 345 Arg Met Gly Leu Phe Gln Thr Ile Tyr Ser Cys Gly Met Phe Val Gly 360 Pro Val Met Met Gly Val Met Met Gln His Ile Asn Leu Ser Ser Gly 375 380 Tyr Ile Leu Ile Ala Ala Leu Ser Val Val Ala Ala Ile Ala Thr Pro 390 395 Leu Ser Ala Arg Trp Val Tyr Ala Arg Lys Thr Gln Thr Ser Ala Gln 410 Leu Leu Lys Asn Gly Ala Tyr Ala Ala Pro Asp Gln <210> 10113 <211> 461 <212> PRT <213> Enterobacter cloacae <400> 10113 Ile Pro Phe Pro Gly Ser Pro Gly Gly Gln Leu Thr Ser Glu Lys Ser 10 Lys Glu Lys Arg Val Ser Trp Lys Leu Lys Thr Gly Lys Ser Thr Glu 20 25 Glu Arg Gln Gln Ala Asn Gln Gln Ile Arg Glu Thr Val Glu Gln Ile 35 40 Leu Ala Asp Ile Glu Lys Arg Gly Asn Lys Ala Ile Arg Glu Leu Ser 55 Ile Lys Phe Asp Arg Tyr Asp Arg Gln Asp Tyr Arg Leu Thr Ser Ala 70 75 Glu Ile Asp Arg Cys Ile Lys Gln Leu Ser Arg Gln Asp Ile Gln Asp 85 90 Ile Glu Phe Ala Gln Gln Gln Val Ala Asn Phe Ala Arg Ala Gln Lys 100 105 110 Glu Cys Leu Arg Asp Leu Glu Ile Glu Thr Arg Pro Gly Val Ile Leu 120 115 125 Gly His Lys Asn Ile Pro Ile Asn Ala Val Gly Cys Tyr Val Pro Gly 135 140 Gly Lys Tyr Pro Leu Leu Ala Ser Ala His Met Ser Ile Ile Thr Ala 150 155 Ser Val Ala Gly Cys Ser Arg Ile Ile Ser Cys Ala Pro Pro Phe Asn 165 170 Gly Gln Pro Ala Pro Ala Ile Val Ala Ala Gln Lys Met Ala Gly Ala 185 Thr Glu Ile Tyr Ala Leu Gly Gly Ile Gln Ala Ile Gly Ala Met Ala 200 205 Leu Gly Thr Asp Ser Leu Ala Pro Val Asp Met Leu Val Gly Pro Gly 215 Asn Ala Phe Val Ala Glu Ala Lys Arg Gln Leu Phe Gly Arg Val Gly 230 Ile Asp Leu Phe Ala Gly Pro Thr Glu Thr Leu Val Ile Ala Asp Asp 245 250 Thr Val Asp Ala Glu Met Cys Ala Thr Asp Leu Leu Gly Gln Ala Glu 265 270 260 His Gly Val Thr Thr Pro Ala Ile Leu Leu Thr Asn Ser Leu Gln Leu 275 280 285 Ala Lys Glu Thr Leu Ser Glu Val Glu Arg Leu Leu Glu Lys Leu Pro 295 300 Thr Ala Asp Ile Ala Arg Gln Ser Trp Gln Asp Tyr Gly Glu Ile Ile 310 315

Val Cys Asp Ser His Glu Glu Met Leu Leu Glu Ala Asp Arg Ile Ala

5604 330 325 Ser Glu His Val Gln Val Met Thr Asp Arg Asp Asp Trp Phe Leu Ala 340 345 Asn Leu Thr Asn Tyr Gly Ala Leu Phe Leu Gly Pro Arg Thr Asn Val 360 365 Ala Tyr Gly Asp Lys Val Ile Gly Thr Asn His Thr Leu Pro Thr Gln 375 380 Lys Ala Ala Arg Tyr Thr Gly Gly Leu Trp Val Gly Lys Phe Met Lys 390 395 Thr Cys Thr Phe Gln Lys Val Leu Ser Asp Glu Ala Thr Ala Glu Ile 405 410 Gly Ser Tyr Cys Ser Arg Leu Ser Leu Glu Gly Phe Ala Gly His 425 420 Ala Glu Gln Ala Asn Ile Arg Val Arg Arg Tyr Gly Gln Thr Glu Val 440 Pro Tyr Ala Thr Pro Ala Pro Val Arg Glu Lys Val 450 455 <210> 10114 <211> 256 <212> PRT <213> Enterobacter cloacae <400> 10114 Ala Met Thr Leu Leu Gln Thr Pro Ser Phe Thr Leu His Gly Lys Arg 10 Ala Leu Val Thr Gly Gly Ser Arg Gly Ile Gly Phe Ala Ala Ala Val 20 25 Ala Leu Ala Gln Ala Gly Ala Glu Val Trp Ile Ala Ala Arg Gly Arg Glu Ala Leu Ala His Ala Ala Gly Leu Ala Ala Glu His Ser Leu Ala 55 60 Phe His Pro Leu Glu Leu Asp Ile Thr Asp Ala Gln Glu Val Glu Arg 70 75 Val Leu Ala Thr Leu Pro Thr Pro Asp Ile Leu Val Asn Ser Ala Gly 85 90 Leu Ala Arg His Gln Pro Phe Leu Glu Val Asn Glu Glu Asn Phe Asp 100 105 Ala Val Met Ala Leu Asn Leu Arg Ala Thr Phe Phe Ile Ser Gln His 120 Val Ala Arg Arg Met Arg Ala Gly Gly Lys Gly Ser Ile Ile His 135 140 Ile Ser Ser Gln Met Gly His Val Gly Gly Pro Glu Arg Ser Val Tyr 150 155 Cys Ala Ser Lys Phe Ala Leu Glu Gly Leu Thr Arg Thr Met Ala Leu 165 170 Glu Leu Gly Asp Ala Gly Ile Arg Val Asn Thr Leu Cys Pro Thr Phe 180 185 190

Ile Glu Thr Asp Leu Thr Arg Ser Ser Leu Ala Asp Pro Ala Phe Arg 200

Arg Tyr Val Leu Asp Asn Ile Lys Leu Arg Arg Pro Gly Arg Leu Glu

Asp Ile Met Gly Pro Val Val Phe Leu Ala Ser Asp Ala Ala Gly Leu

Ile Thr Gly Ser Ala Leu Met Val Asp Gly Gly Trp Thr Ala Thr

215

230

245

205

220

235

250

<sup>&</sup>lt;210> 10115

<sup>&</sup>lt;211> 307

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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<400> 10115
Thr Met Lys Ile Asp Leu Asn Leu Leu Pro Leu Phe Leu Ala Val Ala
Glu Glu Arg Ser Phe Ser Ala Ala Ala Gly Arg Leu Gly Ile Thr Arg
                                25
Ser Ala Val Ser Gln Gly Ile Arg Arg Leu Glu Asp Gly Phe Gln Thr
                            40
Leu Leu Val Met Arg Thr Thr Arg Ser Val Arg Leu Thr Glu Ala Gly
                        55
Glu Arg Leu His Lys Ser Leu Leu Gly Pro Ile Ala Asn Ile Glu Ala
                    70
                                        75
Ala Phe Asp Asp Val Thr Ser Asp Ser Met Pro Arg Gly Gln Leu Arg
                                    90
                85
Ile Ala Val Thr Ser Ile Ala Glu Ala Phe Leu Ser Gly Pro Leu Leu
            100
                                105
Ala Ser Phe Thr Ala Ala His Pro Ala Val Ser Leu Asp Val Phe Val
                            120
                                                125
Ser Asp Glu Glu Phe Asp Ile Val Ala Ala Gly Tyr Asp Ala Gly Val
                        135
                                            140
Arg Leu Gly Glu Val Ile Glu Lys Asp Met Ile Ala Ile Pro Leu Thr
                    150
                                        155
Gly Gln Gln Arg Glu Arg Val Val Ala Ser Pro Ser Tyr Leu Ala Thr
                165
                                    170
                                                         175
His Ser Ala Pro Ala His Pro Arg Glu Leu Val Ala His Arg Cys Ile
            180
                                185
                                                     190
Gly Trp Arg Pro Ser Pro Asp Val Ala Pro Tyr Arg Trp Glu Phe Glu
        195
                            200
                                                205
Glu Ala Gly Val Pro Phe Asp Val Ala Ile Glu Pro Gln Ile Thr Thr
                        215
                                            220
Asn Asp Leu Arg Leu Met Leu Ser Leu Ala Leu Ala Gly Gly Ile
                    230
                                        235
Thr Phe Ala Thr Glu Asp Thr Phe Thr Pro Tyr Ile Glu Ser Gly Gln
                245
                                    250
Leu Val Ser Leu Leu Asp Ala Phe Leu Pro Ser Phe Pro Gly Phe Tyr
                                265
Leu Tyr Phe Pro Gln Arg His Asn Met Ala Pro Lys Leu Arg Ala Leu
                            280
Ile Glu His Ile Arg Gln Trp Arg Gln Leu Pro Ala Thr Gln Pro Thr
    290
                        295
Gln Arg
305
<210> 10116
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 10116
Thr Gly Ser Ile Arg Ser Pro Ser Ser Arg Ala Met Arg Pro Val Thr
                                    10
Pro Ala His His Gln Pro Ala Leu Pro Leu Pro Ser Ile Pro Pro Arg
                                25
His Gln Arq Pro Pro Leu Thr Pro Ser Pro Ile Thr Trp Gly Pro Cys
                            40
Ser Phe Arg Leu Thr Ala Gly Thr Pro Pro Thr Thr Arg Cys Arg Ser
                        55
Cys Arg Glu Pro His Arg Thr Ala Pro Pro Ser Arg Ser Met Thr Glu
                    70
                                        75
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Pro Pro Cys Ser Ala Arg Arg Cys Ser Thr Ala Ala Ala Ala Gly Ala

Leu Arg Gln Pro Arg Arg 100

<210> 10117

<211> 79 <212> PRT

<213> Enterobacter cloacae

<400> 10117

Pro Val Ala Pro Lys Arg Ala Ala Pro Ser Pro Ser Val Trp Arg Thr 1 5 10 15

Ile Gln Arg Ser Pro Pro Arg Gln Thr Ala Thr Asp Pro Gly Ala Thr 20 25 30

Pro Ser Ser Ile Asn Arg Arg Lys Ala Arg Arg Cys Lys Ser Pro Pro 35 40 45

Pro Met Arg Gln Gly Thr Ser Arg Cys Pro Ala Gln Pro Leu Arg Arg 50 55 60

Trp Cys Arg Ser Leu Pro Ala Pro Thr Leu Lys Ser Trp Arg 65 70 75

<210> 10118

<211> 471

<212> PRT

<213> Enterobacter cloacae

<400> 10118

Gly Gln Asp Met Gly Lys Lys Met Pro Tyr Trp Trp Leu Ser Cys Cys 1  $\phantom{\Big|}$  5  $\phantom{\Big|}$  10  $\phantom{\Big|}$  15

Leu Ile Ser Val Pro Ala Ile Ala Ala Asn Pro Ala Ala Met Ile Asn 20 25 30

Thr Gly Gln Leu Ser Glu Thr Gln Glu Leu Pro Ser Leu Asn Gly Arg 35 40 45

Val Ala Pro Val Ala Ser Lys Ala Ala Pro Gly Thr Leu Gln Leu Asn 50 55 60

Glu Ala Val Asn Arg Ala Val Thr Trp His Pro Ala Ile Ser Glu Ala 65 70 75 80

Val Gly Lys Leu Tyr Gln Gln Ser Glu Asn Val Asp Val Ala Lys Ser 85 90 95

Lys Tyr Tyr Pro Gln Ile Asn Ala Gly Met Asp Asn Gly Tyr Ser His  $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$ 

Asp Gly Asp Asp Asp Gly Phe Thr Pro Ser Leu Val Leu Ser Leu Ser 115 120 125

Gln Met Leu Tyr Asp Phe Gly Lys Val Ala Ser Gln Val Arg Ala Glu 130 135 140

Asn Ala Gly Val Ala Gln Gln Gln Ala Asn Val Leu Val Ser Ile Asp 145 · 150 155 160

Thr Ile Ala His Asp Thr Ala Ile Ala Met Val Gln Val Gln Thr Trp
165 . 170 . 175

Gln Gln Met Val Glu Thr Ala Lys Glu Gln Leu Asp Ala Leu Ser Ser 180 185 190

Ile Gly Thr Leu Thr Lys Gln Arg Asn Asp Glu Gly Ala Thr Ser Leu 195 200 205

Ser Asp Val Val Gln Thr Asp Ala Arg Ile Glu Gly Ala Arg Ala Gln 210 215 220

Leu Met Gln Tyr Gln Ala Ser Leu Asp Ser Ser Arg Ala Thr Leu Met 225 230 235 240

Ser Leu Leu Gly Trp Asp Ser Leu Asn Ala Val Ser Asn Asp Phe Pro
245
250
255
Cla Ser Leu Ala Ara Ser Cua Asn Ila Ala Clu Bro Asn Asa Asa Leu

Gln Ser Leu Ala Arg Ser Cys Asp Ile Ala Glu Pro Asp Asp Arg Leu 260 265 270

Val Pro Ser Val Leu Ala Ala Trp Ala Gln Ala Asn Val Ala Gln Ala

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280
        275
                                                285
Asn Leu Asp Tyr Ala Asn Ala Gln Met Thr Pro Thr Val Ser Leu Glu
                        295
                                            300
Pro Glu Val Arg His Tyr Leu Asn Asp Arg Tyr Ala Gly Asn Glu Thr
                    310
                                        315
Arg Asp Arg Thr Gln Tyr Ser Ala Trp Val Lys Val Gln Met Pro Leu
                325
                                    330
Tyr Gln Gly Gly Gly Leu Thr Ala Arg Arg Asn Ala Ala Gly His Ala
                                345
Val Glu Ser Ala Gln Ser Thr Ile Gln Arg Thr Arg Leu Glu Val Arg
                            360
                                                365
Gln Lys Leu Leu Glu Ala Arg Ser Gln Val Met Ser Leu Met Ser Thr
                        375
Leu Gln Ile Gln Gly Arg Gln Glu Ala Leu Ser Ala Arg Thr Arg Glu
                    390
                                        395
Leu Tyr Gln Gln Tyr Leu Asp Leu Gly Ser Arg Pro Leu Leu Asp
                405
                                    410
Val Leu Asn Ala Glu Gln Glu Val Tyr Gln Ala Arg Phe Thr Gln Gln
                                425
            420
Gln Thr Ala Gly Gln Leu His Gln Leu Gln Leu Asn Cys Leu Tyr Asn
                            440
                                                445
Thr Gly Arg Leu Arg His Ala Phe Asp Leu Glu Asn Arg Thr Ile Gln
                        455
    450
Thr Val Glu Ile Gln Pro
<210> 10119
<211> 114
<212> PRT
<213> Enterobacter cloacae
<400> 10119
Arg Arg Pro Lys Arg Gly Trp Thr Ala Leu Cys Ser Cys Arg Pro Arg
Thr Ser Ala Lys Arg His Arg Ser Ala Arg Thr Cys Cys Ala Ala Thr
            20
                                25
Ile Phe Ser Ser Arg Arg Ser Ser Ala Ile Thr Arg Lys Ile Pro Ala
                            40
Trp Arg Cys Ala Leu Thr Ala Trp Arg Ser Lys Arg Ala Lys Lys Trp
Arg Ser Ser Gly Ala Thr Ala Arg Ala Asn Gln Pro Cys Cys Arg Arg
                    70
Trp Arg Ala Gly Trp Ile Trp Arg Ala Val Asn Cys Gly Ser Thr Thr
Ser Ala Cys Arg Ile Trp Thr Trp Leu Thr Cys Gly Glu Thr Ser Ala
            100
                                105
Leu
<210> 10120
<211> 417
<212> PRT
<213> Enterobacter cloacae
<400> 10120
Thr Thr Ala Val Cys Ser Asn Ser Ser Arg Gln Pro Asp Gly Ser Gly
                                    10
Lys Met Lys Ile Ser Gln Arg Asp Val Ala Ala Val Glu Asp Leu Asp
                                25
Asn Ala Leu Asp Ser Glu Ser Gly Tyr Thr Gly Ala Arg Arg Ile Val
```

Phe Phe Ser Leu Val Met Phe Val Val Leu Gly Val Trp Ala Trp Phe 55 Gly Val Leu Asp Glu Val Ser Thr Gly Thr Gly Lys Val Ile Pro Ser 70 75 Ser Arg Glu Gln Val Leu Gln Ser Leu Asp Gly Gly Ile Leu Thr Glu 85 90 Leu Asn Val His Glu Gly Asp Gln Val Gln Ala Gly Gln Val Leu Ala 105 Arg Leu Asp Pro Thr Arg Ser Glu Ser Asn Val Gly Glu Ser Ala Ala 120 Arg Tyr Arg Ala Ser Leu Ala Ser Ser Ala Arg Leu Tyr Ala Glu Val 135 140 Asn Asp Leu Pro Leu Lys Phe Pro Pro Ser Leu Glu Lys Trp Thr Asp 150 155 Leu Thr Ala Ala Glu Thr Arg Leu Tyr Asn Ser Arg Ala Gln Leu 170 165 Glu Asp Thr Gln Arg Glu Leu Arg Ser Ala Leu Ala Leu Ala Asn Lys 180 185 Glu Leu Ala Ile Thr Gln Arg Leu Val Lys Thr Gly Ala Ala Ser His 200 195 . Val Glu Val Leu Arg Leu Gln Arg Gln Lys Ser Asp Leu Glu Leu Lys 220 215 Leu Thr Asp Val Arg Ser Gln Tyr Tyr Val Gln Ala Arg Glu Ala Leu 230 235 Ser Lys Ala Asn Ala Glu Val Asp Met Val Ser Ala Ile Leu Lys Gly 245 250 Arg Glu Asp Ser Val Thr Arg Leu Thr Val Lys Ser Pro Val Arg Gly 260 265 270 Ile Val Lys Asn Ile Lys Val Thr Thr Ile Gly Gly Val Ile Pro Pro 275 280 285 Asn Gly Glu Leu Met Glu Ile Val Pro Val Asp Asp His Leu Leu Ile 295 300 Glu Thr Arg Leu Ser Pro Arg Asp Ile Ala Phe Ile His Pro Asn Gln 310 315 Glu Ala Leu Val Lys Ile Thr Ala Tyr Asp Tyr Ala Ile Tyr Gly Gly 325 330 Leu His Gly Val Val Glu Thr Ile Ser Pro Asp Thr Ile Gln Asp Glu 340 345 Ala Lys Pro Glu Val Phe Tyr Tyr Arg Val Phe Ile Arg Thr Ser Gln 360 Asp Tyr Leu Val Asn Lys Ala Gly Arg His Phe Ser Ile Val Pro Gly 375 Met Ile Ala Thr Val Asp Ile Lys Thr Gly Glu Lys Thr Val Leu Asp 390 395 Tyr Met Ile Lys Pro Phe Asn Arg Ala Lys Glu Ala Leu Arg Glu Arg 405 410

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<210> 10121
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## <400> 10121

Ala Pro Ser Ser Ala Gly Gln Lys Asn Cys Ser Asp Phe Ala Ser Ser 1 10 15 15 Thr Leu Leu Tyr Ile Lys Pro Val Tyr Thr Val Tyr Lys His Ser Tyr 20 25 30 Gly Phe Ser Tyr Arg Lys Thr Ile Met Leu Ala Gln Leu Thr Ile Ser  $\frac{35}{40}$ 

<sup>&</sup>lt;211> 594

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

Asn Phe Ala Ile Val Arg Glu Leu Glu Ile Asp Phe His Ser Gly Met 55 60 Thr Ala Ile Thr Gly Glu Thr Gly Ala Gly Lys Ser Ile Ala Ile Asp 70 75 Ala Leu Gly Leu Cys Leu Gly Gly Arg Ala Glu Gly Asp Met Val Arg 85 90 Thr Gly Ala Ala Arg Ala Asp Leu Cys Ala Arg Phe Ser Leu Lys Asp 105 Thr Pro Ala Ala Leu Arg Trp Leu Glu Ala Asn Gln Leu Glu Asp Gly 120 Arg Glu Cys Leu Leu Arg Arg Val Ile Ser Ser Asp Gly Arg Ser Arg 135 140 Gly Phe Ile Asn Gly Thr Ala Val Pro Leu Ser Gln Leu Arg Glu Leu 150 155 Gly Gln Leu Leu Ile Gln Ile His Gly Gln His Ala His Gln Gln Leu 165 170 Ile Lys Pro Glu Gln Gln Lys Ala Leu Leu Asp Gly Tyr Ala Gly Glu 185 Tyr Ala Leu Thr Gln Leu Met Ala Glu His Tyr Arg Gln Trp His Gln 200 205 Ser Cys Arg Glu Leu Ala Gln His Gln Gln Ser Gln Glu Arg Thr 210 215 220 Ala Arq Ala Glu Leu Leu Glu Tyr Gln Leu Lys Glu Leu Asn Glu Phe 235 230 Asn Pro Gln Ala Gly Glu Phe Glu Gln Ile Asp Glu Glu Tyr Lys Arg 250 245 Leu Ala Asn Ser Gly Gln Leu Leu Ser Thr Ser Gln Asn Ala Leu Asn 260 265 Met Leu Ala Asp Gly Glu Asp Val Asn Leu Gln Ser Gln Leu Tyr Asn 280 Val Arg Gln Leu Val Thr Glu Leu Thr Gly Met Asp Asn Lys Leu Ser 295 300 Gly Val Leu Glu Met Leu Glu Glu Ala Ala Ile Gln Ile Ser Glu Ala 310 315 Gly Asp Glu Leu Arg His Tyr Cys Glu Arg Leu Asp Leu Asp Pro Asn 325 330 Arg Leu Phe Glu Leu Glu Gln Arg Ile Ser Arg Gln Ile Ser Leu Ala 340 345 Arg Lys His His Val Thr Pro Glu Glu Leu Pro Asn Tyr Tyr Gln Ser 360 Leu Leu Glu Gln Gln Gln Leu Asp Asp Gln Ala Asp Ser Leu Glu 375 380 Thr Leu Ser Leu Ala Val Asn Leu His His Gln Gln Ala Leu Glu Thr 390 395 Ala Lys Arg Leu His Asp Val Arg Gln His Tyr Ala Gln Glu Leu Ser 410 Gln His Ile Thr Asp Ser Met His Thr Leu Ala Met Pro His Gly Val 425 Phe Thr Ile Asp Val Arg Phe Glu Glu Asn His Leu Thr Ala Glu Gly 440 Ala Asp Arg Val Glu Phe Arg Val Thr Thr Asn Pro Gly Gln Pro Leu 455 460 Gln Ala Ile Ser Lys Val Ala Ser Gly Gly Glu Leu Ser Arg Ile Ala 470 475 Leu Ala Ile Gln Val Ile Thr Ala Arg Lys Met Glu Thr Pro Ala Leu 485 490 Ile Phe Asp Glu Val Asp Val Gly Ile Ser Gly Pro Thr Ala Ala Val 505 Val Gly Lys Leu Leu Arg Gln Leu Gly Glu Ser Thr Gln Val Met Cys 520 Val Thr His Leu Pro Gln Val Ala Gly Cys Gly His His His Phe Ile

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535
                                            540
Val Ser Lys Glu Thr Asp Gly Glu Met Thr Glu Thr His Met Lys Pro
                   550
                                        555
Leu Asp Lys Arg Ser Arg Leu Gln Glu Leu Ala Arg Leu Leu Gly Gly
                565
                                    570
                                                        575
Ser Glu Val Thr Arq Asn Thr Leu Ala Asn Ala Lys Glu Leu Leu Ala
Ala
<210> 10122
<211> 126
<212> PRT
<213> Enterobacter cloacae
<400> 10122
Ala Ala Tyr Cys Ser Gly Pro Lys Arg Asn Gln Ile Thr Met Arg Cys
Lys Thr Leu Thr Ala Ala Ala Val Leu Leu Met Leu Thr Ala Gly
            20
                                25
Cys Ser Thr Leu Glu Lys Val Val Tyr Arg Pro Asp Ile Asn Gln Gly
                            40
Asn Tyr Leu Thr Pro Asn Asp Val Ser Lys Ile Arg Val Gly Met Thr
   50
                        55
                                            60
Gln Gln Gln Val Ala Tyr Ala Leu Gly Thr Pro Met Met Ser Asp Pro
                    70
                                        7.5
Phe Gly Thr Asn Thr Trp Phe Tyr Val Phe Arg Gln Gln Pro Gly His
                                    90
Glu Asp Val Thr Gln Gln Thr Leu Thr Leu Thr Phe Ser Ser Ala Gly
           100
                                105
Val Leu Thr Asn Ile Asp Asn Lys Pro Ala Leu Thr Lys
       115
                            120
<210> 10123
<211> 278
<212> PRT
<213> Enterobacter cloacae
<400> 10123
Asp Arg Ala Ala Ala Ser Val Asp Asn Gly Val His Thr Val Arg
Lys Asn Ser Leu Lys Thr Ala Phe Leu Glu Asn Thr Pro Ile Val Asn
Gly Trp Leu Ala Ile Pro Ser Gly Tyr Ser Ala Glu Ile Met Gly His
                            40
Gln Gly Tyr Asp Ala Val Thr Val Asp Leu Gln His Gly Met Ile Asp
Phe Ala Ser Ala Leu Ser Met Leu Gln Ala Leu Ser Ala Thr Pro Ala
Val Pro Leu Val Arg Val Ala Asp Asn Asp Pro Ala Gln Ile Met Arg
Val Leu Asp Ala Gly Ala Tyr Gly Val Ile Cys Pro Met Ile Ser Ser
            100
                                105
                                                    110
Ala Glu Gln Ala Arg Arg Phe Val Ala Ala Cys Arg Tyr Pro Pro Leu
                                                125
                            120
Gly Val Arg Ser Phe Gly Pro Ala Arg Gly Leu Leu Tyr Gly Gly Ser
                        135
                                            140
Asp Tyr Pro Gln His Ala Asn Asp Glu Ile Leu Thr Leu Ala Met Ile
                    150
                                        155
Glu Thr Arg Gln Gly Leu Ala Asp Leu Asp Ala Ile Leu Asp Thr Glu
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Gly Leu Asp Gly Val Phe Ile Gly Pro Asn Asp Leu Ser Leu Thr Leu 180 185 Thr Gly Ser Ala Ser Ala Glu Ser Gln His Pro Glu Met Leu Ala Ala 195 200 205 Ile Glu Arg Val Ile His Cys Cys Arg Gln Gln Lys Ile Ala Gly 215 220 Ile Phe Cys Thr Ser Gly Ala Ala Ala Ala Ala Arg Ile Ala Gln Gly 230 235 Phe Gln Phe Val Thr Pro Ala Asn Asp Val Met Gln Leu Gly Arg Ala 250 Ser Arg Glu Ala Ile Ala Leu Ala Arg Gly Asn Ala Ile Pro Thr Thr 260 265 Gly Ala Ser Gly Tyr 275 <210> 10124 <211> 650 <212> PRT <213> Enterobacter cloacae <400> 10124 Pro Leu Trp Asn Tyr Phe Leu Arg His Leu His Leu Leu Tyr Phe Leu 10 Phe Thr Asp Val Ile Phe Arg Phe Ala Leu Pro Val Ser Asn Gly Ser 20 Val Ile Asn Asn Tyr Arg Gly Asn Arg Ile Ser Phe Ser Met Asp Phe Tyr Phe Thr Arg Phe Glu His Arg Gln Pro Pro Glu Pro Leu Lys Thr Pro Arg Trp Val Met Leu Thr Trp Gln Val Leu Ala Val Ala Ser Leu 70 Ile Leu Gly Ala Asn Tyr Ile Tyr Trp Arg Trp Thr Ala Ser Leu Asn 90 Thr Asp Ala Leu Trp Tyr Ala Ile Pro Leu Val Leu Ala Glu Thr Leu 105 Ala Trp Ile Gly Thr Val Leu Phe Thr Ile Asn Leu Trp Lys Glu Asp 120 125 Asp Pro Pro Gln Asn Pro Pro Pro Ile Glu Ile Asn Asp Cys Leu Arg 135 Ser Glu Asp Ala Glu Ala Ser Arg Pro Ile Lys Val Asp Leu Phe Ile 155 Ala Thr Tyr Ser Glu Asp Val Glu Leu Val Arg Leu Ser Ile Arg Asp 170 Ala Met Lys Met Asp Tyr Pro Gly Pro Leu Asp Tyr Lys Val His Val 185 Leu Asp Asp Gly Arg Arg Pro Glu Met Lys Ala Val Cys Asp Gln Glu 195 200 Gly Ala Asn Tyr Ile Ser Arg Gln Thr Asn Ile Gly Phe Lys Ala Gly 215 220 Asn Leu Arg Asn Gly Leu Glu Gln Thr Asp Gly Asp Phe Leu Ile Ile 235 230 Cys Asp Ala Asp Thr Arg Val Phe Pro Thr Leu Leu Ser His Thr Leu 245 250 Gly Tyr Phe Arg Asp Pro Asp Val Ala Trp Val Gln Thr Pro Gln Trp 260 265 270 Phe Phe Asp Leu Pro Glu Gly Glu Asn Leu Ala Arg Trp Leu Gly Arg 280 285 Lys Ala Gly Lys Thr Gly Tyr Gly Leu Gly Trp Leu Ala Gln Lys Phe 295 300

Ile Gly Pro Val Thr Ile Gly Arg Asp Pro Phe Phe Asn Asp Pro Arg

315

```
Met Phe Tyr Asp Val Ile Leu Arg Arg Asn Trp Ala Asn Ala Ala
                325
                                    330
Phe Cys Cys Gly Ala Ala Ser Ile His Arg Arg Glu Ala Val Met Gln
            340
                                345
Ala Ala Leu Arg Ser Tyr Val Trp Thr Thr Glu Glu Glu Ile Asp Arg
                            360
His Thr Arq Asp Ile Arq Asp Pro Val Met Arq Glu Thr Leu Gln Asp
                        375
                                            380
Ala Met Arg Pro His Val Ala Phe Asp Thr Glu Leu Thr Pro Tyr Lys
                    390
                                        395
Phe His Val Ser Glu Asp Ile Tyr Thr Ser Ile Leu Leu His Gly Asp
                405
                                    410
Ala Ala Arg Arg Trp Arg Ser Val Met His Pro Arg Ile Glu Ser Lys
            420
                                425
Met Leu Ser Pro Gln Asp Met Leu Thr Trp Met Ile Gln Arg Phe Lys
                            440
Tyr Ala Ala Gly Ser Leu Asp Ile Leu Phe His Asp Asn Ile Phe Ser
                        455
                                            460
Arg Arg Arg Phe Lys Leu Ser Leu Pro Gln Thr Leu Met Tyr Ala Thr
                    470
                                        475
Thr Phe Trp Ser Tyr Leu Ala Cys Val Trp Asn Thr Val Phe Leu Ile
                485
                                    490
Ser Pro Ile Val Tyr Leu Phe Thr Gly Ile Pro Pro Val Ser Ala Trp
                                505
            500
                                                     510
Ser Glu Pro Phe Tyr Leu His Phe Leu Pro Phe Phe Ile Val Ser Glu
                            520
        515
                                                 525
Leu Ala Phe Met Phe Gly Thr Trp Gly Ile Ser Ala Trp Asp Gly Arg
                                             540
                        535
Ala Ser Tyr Leu Ser Phe Phe Ser Met Asn Leu Arg Ala Leu Asn Thr
                    550
                                        555
Val Leu Arg Gly Glu Gln Ile Lys Phe His Val Thr Pro Lys Glu Arg
                565
                                    570
Gln Thr Gly Arg Phe Leu Tyr Leu Val Lys Pro Gln Ile Ala Ile Val
            580
                                585
Val Leu Thr Leu Ala Gly Leu Ile Trp Gly Gly Ile Gln Val Ala Arg
                            600
Gly Gln Val Asp Asp Pro Ser Gly Tyr Val Ile Asn Ile Phe Trp Gly
                        615
                                             620
Ala Val Asn Ile Ala Ala Met Leu Pro Leu Ile Phe Ala Ala Met Trp
                    630
                                        635
Thr Pro Ala Glu Glu Val Ser Glu
                                    650
                645
```

<210> 10125

<211> 909

<212> PRT

<213> Enterobacter cloacae

<400> 10125

 Val
 Thr
 Met
 Arg
 Ala
 Thr
 Ser
 Arg
 Phe
 Asp
 Leu
 Asn
 Ala
 Leu
 Pro
 Val

 Gly
 Val
 Met
 Ile
 Tyr
 Asp
 Pro
 Ala
 Glu
 His
 Leu
 Leu
 Ala
 Trp
 Asn
 Asp

 Gln
 Ile
 Ser
 Arg
 Phe
 Tyr
 Pro
 Val
 Ile
 Ala
 Pro
 Trp
 Leu
 Ile
 Ala
 Gly
 Asp
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Leu Tyr Val Gln His Gln Arg Leu Ala Asp Gly Gly Ile Leu Ser Leu 100 105 His Thr Asp Ile Thr Glu Leu Asp Asp Ala Gln Arg Ser Arg Gln Gln 115 120 Leu His Asp Asp Phe Leu Leu Thr Ala Glu Ser Ile Gln Ile Gly Ile 135 140 Trp Asn Trp Gln Val Ser His Asp Ser Leu Glu Val Asn Asp Thr Leu 150 155 Leu Ala Met Val Gly Gln Ser Arg Thr Gln Leu His Tyr Pro Leu Arg 170 Phe Leu Leu Asn Leu Val His Glu Glu Asp Arg Ala Val Leu Arg Asn 185 Ala Met Ile Ala Ser Arg Gln Glu His Met Pro Val Phe Glu Ser Glu 200 Ile Arg Val Gln His Ala Thr Gln Gly Trp Arg Trp Met Leu Val Ser 215 220 Gly Gln Val Val Thr Leu Ser Met Gln Gln Gln Ala Glu Arg Val Ile 230 235 Gly Thr Leu Gln Asp Ile Thr Arg Arg Lys Glu Ala Glu Leu Leu Ala 250 245 Ile Glu Ala Ala Lys Val Ala Arg Glu Ala Asn Glu Ala Lys Ser Ala 260 265 Phe Leu Ala Asn Met Ser His Glu Ile Arg Thr Pro Met Asn Gly Ile 280 275 Leu Gly Met Thr Gln Leu Cys Leu Asp Thr Gln Leu Thr Pro Glu Gln 295 300 Arg Glu Tyr Leu Ser Leu Val Met Ser Ser Ala Gln Ser Leu Leu His 310 315 Ile Ile Asn Asp Ile Leu Asp Phe Ser Arg Ile Glu Ser Gly Lys Met 325 330 Thr Val Asp Thr Glu Pro Leu Glu Ile Arg Pro Phe Val Gln Ser Leu 340 345 Ile Arg Pro His Met Pro Ser Ala Ser Glu Lys Gly Ile Glu Leu Leu 360 365 Val Asp Ile Ala Pro Gly Val Pro Glu Val Leu Ile Val Asp Gly Pro 375 370 380 Arg Leu Arg Gln Ile Leu Thr Asn Leu Leu Gly Asn Ala Leu Lys Phe 390 395 Thr His His Gly Glu Val Met Leu Ala Ile Glu Pro Thr Glu Ser Glu 405 410 Gly His Trp Arg Phe Arg Ile Arg Asp Ser Gly Ile Gly Ile Pro Met 420 425 Glu Lys Gln Lys Ala Ile Phe Glu Ala Phe Ser Gln Ala Asp Ser Ser 440 Thr Thr Arg Arg Tyr Gly Gly Thr Gly Leu Gly Leu Thr Ile Ser Ala 455 Arg Leu Val Ser Leu Met Gly Gly Glu Leu Thr Val Gln Ser Glu Pro 470 475 Gly Glu Gly Ser Glu Phe Ala Phe Thr Leu Pro Leu Glu Gly Gln Leu 485 490 Ala Val Ser Ala Thr Asp Ala Pro Val Ala Arg Phe Asn Gly Glu Ser 505 Val Leu Val Val Asp Asp Asn Ser Thr Asn Leu Arg Leu Leu Asp Thr 520 525 Met Leu Arg Gln Met Gly Leu Thr Pro Thr Cys Val Asn Asn Ala Gly 535 540 Glu Ala Leu Ser Leu Thr Ala Lys Arg Gly Tyr Trp Pro Leu Ile Leu 555 550 Leu Asp Ala Gln Met Pro Asp Met Asp Gly Val Ser Leu Ala Ile Glu 570 Leu Ser Val Met Pro Gln Ala Glu Gln Ser His Ile Ile Met Leu Ser

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580
                                585
Ser Met Ser Arg His Phe Asp Ala Asn Met Leu Lys Arg Ile Gly Val
                          600
                                               605
Ala His Tyr Leu His Lys Pro Val Ala Gln Arg Glu Leu Tyr Gln Thr
                       615
                                            620
Ile Ala Ser Val Leu Ala Pro Ala Pro Leu Ala Ser Pro Thr Ala Val
                   630
                                        635
Pro Ala Ser Ala Leu Val Thr Ala Pro Val Thr Ala Pro Val Thr Ala
                                    650
Gln Ala Ser Leu Arg Ile Leu Leu Ala Glu Asp Asn Leu Val Asn Gln
                                665
Lys Val Ala Arg Arg Leu Leu Glu Gln Leu Gly His Arg Cys Glu Val
                            680
Val Ser Asn Gly Arg Glu Ala Leu Glu Arg Trp Arg Glu Gln Ser Trp
                        695
                                            700
Asp Leu Met Leu Val Asp Leu Gln Met Pro Glu Met Asp Gly Glu Thr
                    710
                                        715
Ala Ile Arg Leu Leu Arg Glu Glu Thr Leu Thr Arg Gly Arg Ser His
                725
                                    730
Gln Pro Ala Ile Ala Met Thr Ala His Ala Met Gln Gly Asp Lys Ala
            740
                                745
Arg Cys Leu Ala Met Gly Phe Asp Gly Tyr Ile Ala Lys Pro Val Ser
                            760
Gln Glu Ala Leu Arg Glu Glu Ile Ala His Val Leu Ala Gly Glu Asp
                                            780
                        775
Lys Gly Leu Pro Asp Glu Ala Gln Leu Leu Lys Gln Cys Ala Asp Asp
                    790
                                        795
Pro Glu Leu Val Asn Glu Leu Leu Ala Leu Phe Gly Asn Gly Leu Asp
                805
                                    810
Glu Ala Val Ala Ala Met Ala Leu Asn Ile Ala His Asn Asp Arg Asp
                                825
                                                    830
            820
Ala Leu Arg Arg Ala Ala His Lys Leu Arg Gly Glu Ala Val Thr Leu
       835
                            840
Gly Phe Ile Arg Leu Ser Glu Val Leu Gln Gln Leu Glu Ser Gln Ala
                                            860
                        855
Val Ser Leu Asn Gln Thr Gly Leu Ser Val Leu His Gly Glu Leu Ile
                    870
                                        875
Glu Glu Ala Arg Arg Ser Ala Ala Trp Leu Arg Arg Ala Gln Glu
                885
                                    890
Val Lys Asp Asp Gln Ala Ser Ser Ala Ala Gly Asn
            900
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<210> 10126

<211> 156

<212> PRT

<213> Enterobacter cloacae

## <400> 10126

Ala Met Asn Ala Gly Tyr Pro Thr Met Leu Leu Ile Pro Gly Met Ser 10 15

Ala Phe Gln Arg Val Asn Glu Pro Ala Pro Gly Leu Ala Gly Arg Met 20 25 30

Phe Phe Gln Val His Cys Pro His Gly Lys Thr Gly Pro Asn Val Gly 35

Leu His Leu His Val Gln Arg Asn Pro Phe Ser Arg Cys Glu Ile Phe 50 55 60

Leu Asp His Trp Gln Arg His Ile Thr Pro Pro Ser Val Glu Leu Ala 65 70 75 80

Pro Gln Phe Asn Ile Arg Val Thr Ser Leu Gln Pro Gly Ala Val Glu 85

Ser Glu Leu Phe Glu His Ile Ser Asp Lys Asn Tyr Arg Ala Gln Met

100 105 Glu Gln Leu Lys Glu Lys Met Thr Phe Leu Lys Ala Asp Asp Val Ala 120 125 Asp Ser Ile Pro Tyr Val Leu Gln Ala Pro Glu His Val Asn Val Ala 135 Glu Leu Phe Ile Met Pro Pro Glu Gln Pro Trp 150 <210> 10127 <211> 129 <212> PRT <213> Enterobacter cloacae <400> 10127 Tyr Tyr Ser Gln Thr Lys Arg Thr Cys Ala Gln Cys Arg Ser Ala Leu Leu Ser Thr Gln Leu Gln Gly Leu Glu Leu Thr Ser Ile Met Ile Asn 25 20 His Phe Arg Asp Gln Trp Leu Glu Asp Phe Phe Leu Tyr Gly Arg Ser 35 40 Ser Asn Val Ile Pro Leu Asn Leu Glu Thr Ala Leu Ala Arg Lys Leu 55 Asp Ile Ile Asn Ala Ala Met Ser His Leu Asp Leu Arg Ser Pro Pro 70 75 Gly Asn Met Tyr Glu Ala Leu Ser Pro Pro Leu Lys Gly Tyr Ser Ser 85 90 Ile Arg Val Asn Arg Gln Tyr Arg Leu Val Phe Arg Trp Ser Glu Gly 100 105 110 Lys Ala Asp Asp Leu Tyr Leu Ser Pro His Lys Tyr Thr Gln His Lys 115 120 <210> 10128 <211> 92 <212> PRT <213> Enterobacter cloacae <400> 10128 Arg Pro Met Pro Arg Ser Ala Cys Ala Ser Ala Pro Ala Pro Cys Gln 15 10 Arg Gln Cys Leu Ser Pro Ala Pro Ala Asn Arg Arg Ser Pro Cys Pro Ala Cys Arg Leu Pro Cys Arg Thr Ser Ala Gly Gly Cys Arg Pro 40 Arg Arg Arg Ser Pro Ala Pro Leu Gln Glu Arg Ser Pro Leu Gln Ser Gly Arg Arg Asn Arg Gln Trp Arg Ser Gly Arg Glu Arg Ala Lys Asn 70 Gly His Ala Pro Pro Thr Pro Ala Arg Pro Ala <210> 10129 <211> 308 · <212> PRT <213> Enterobacter cloacae <400> 10129 Ala Met Ser Ala Gln Asp Arg Gln Thr Leu Ser Leu Pro Ser Leu Arg 10

Asn Leu Gln Ala Phe Ile Ala Val Ala Asn Ala Leu Ser Ile His Gln

25

20

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Ala Ala Glu Gln Leu Asn Val Thr Pro Ser Ala Val Ser His Gln Ile
                            40
                                                 45
Ala Ser Leu Glu Ser Trp Leu Gly Lys Lys Leu Phe Ile Arg Ser Gly
                        55
                                             60
Lys Gly Val Gln Leu Thr Pro Thr Gly Glu Gln Tyr Leu Arg Glu Val
                    70
                                         75
Ser Ala Ala Met Ser Ala Ile Gly Arg Ala Thr Asp Gln Ile Val Lys
                                     90
Glu Lys Asp Asn Ala Val Leu Arg Val His Ser Ser Pro Thr Phe Gly
                                105
Leu Ser Trp Leu Leu Arg Arg Leu Gly Arg Phe Arg Ala Glu Tyr Pro
                            120
Asp Ile Thr Ile Asn Leu Thr Cys Ser Tyr Glu Asn Leu Gln Phe Ala
                        135
                                             140
Arg Asp Asn Ile Asp Ile Asp Ile Arg His Gly Ile Pro Asp Trp Asp
                                        155
                    150
Ala Tyr Arg Val Met Thr Ile Lys Asn Asp Thr Leu Val Val Leu Ala
                                     170
                165
Ser Pro Asp Tyr Ala Glu Glu His Pro Ile Ser Thr Pro Ala Asp Leu
            180
                                 185
Leu Gln Gln Ser Leu Ile Ser Ser Thr Ser Thr Leu Val Asn Trp Glu
                            200
                                                 205
Lys Trp Phe Ala Trp His Asn Ile Asp Arg Pro Trp Leu Asn Phe Ser
                        215
                                             220
Leu Ser Phe Asp Arg Ser Tyr Met Ser Phe Glu Ala Ala Arg Met Gly
                    230
                                         235
Leu Gly Phe Ile Leu Glu Ser Lys Met Met Ala Thr Asp His Leu Lys
                245
                                     250
Asp Gly Ser Leu Val Gln Val Leu Pro Asp Glu Met Gly Ile Ala Ile
                                 265
                                                     270
Asn Ala His His Leu Val Met Pro His Met Asn Glu Arg Ala Trp Lys
                            280
Ile Gln Gln Phe Val Glu Trp Ile Asp Arg Glu Leu Arg Leu Ser Gly
                        295
Tyr His Leu
305
<210> 10130
<211> 297
<212> PRT
<213> Enterobacter cloacae
<400> 10130
Lys Val Arg Ser Gly Ala Leu Thr Pro Ala Leu Ser His Arg Glu Arg
                                     10
Gly Ile Asn Arg Gly Ile Gln His Met Leu His His Lys His Pro Ala
                                 25
            20
His His Gln Val Gly Arg Asp Lys His Gln Gly Thr Ala Leu Gly Lys
                            40
Ala His His Arg Gly Val Asp His Ala Lys Gln Arg Gln Gln Arg Ala
                        55
Ser Cys Gly Gly Asp Gly Pro Ala Gln Arg Phe Val Glu Asp Gly Glu
                    70
                                        75
Asp Gly Asp Thr Ala Pro Glu His Ala Gly Glu Arg Arg Ala Val Ala
                85
                                     90
Glu Met His Gln Ala Phe Val Val Asp Thr Leu Ala Val Gln His Val
                                105
                                                     110
Gly Ala Asp Phe Arg Arg Ala Gly Pro Arg Gly Ala His His Ala Val
                            120
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His His Gly Gln Arg Pro Val Gly Asp Pro Arg Glu Gln Ala Asp Glu

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135
                                            140
Asp Asn Gly His Leu His Phe Arg Gly Phe Pro His His Leu Val Gly
                                    155
                   150
Gly Asp Asp Ala Asp Lys His Gln Asn Arg His Asp Gly Gly His Arg
                                   170
               165
Tyr Asp Gly Glu His Lys Gly Pro Gln Pro Glu Gln Arg His Asp Glu
           180
                               185
                                                    190
His Gly His Ala Gly Arg Gln Gly Val Ala Asp Ala Gly Ala His Arg
                           200
                                                205
Phe Pro Ala Arg Met Ala Asp Val Asp Arg Asp Arg Glu Arg Ile Ala
                       215
                                            220
His Gln Ala Ala Glu His Arg Gly Gln Thr Val Arg Gln His Tyr Leu
                    230
                                        235
Ala Gly Arg Val Phe Ile Pro Cys Arg Val Gly Ala Phe Asp Val Leu
                                    250
Gln Val Lys Asp Val Val Arg Gln Pro Gln Arg Tyr Gly Gly Arg Gln
                                265
Ile Arg Gln Arg Val Arg Gln Pro Leu His Lys Ala Val His Val His
                            280
Phe Arg Arg Val Lys Ala Glu Gly
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<211> 328
<212> PRT
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Cys Asn Ala Ser Val Lys Ile Cys Ser Lys Leu Met Val Thr Arg Ser
                                    10
His Asn Met Asn Ser Ile Phe Thr Glu Glu Asn Leu Leu Ala Phe Thr
            20
                                25
Thr Ala Ala Arg Phe Gly Ser Phe Ser Lys Ala Ala Glu Leu Gly
       35
                                                45
Val Thr Thr Ser Ala Ile Ser Tyr Thr Ile Lys Arg Met Glu Thr Gly
                        55
Leu Asp Val Val Leu Phe Val Arg Asn Thr Arg Ser Ile Glu Leu Thr
                    70
                                        75
Glu Ser Gly Phe Tyr Phe Tyr Arg Lys Ala Thr Asp Leu Leu Asn Asp
                                    90
                85
Phe His Ala Ile Lys Arg Gly Ile Asp Thr Ile Ser Gln Gly Ile Glu
                                105
            100
Thr Arg Val Arg Ile Cys Ile Asn Gln Leu Leu Tyr Thr Pro Arg His
                            120
Thr Ala Arg Leu Leu Gln Val Leu Lys Lys Gln Phe Pro Thr Cys Gln
                        135
                                            140
Ile Thr Val Thr Glu Val Tyr Asn Gly Val Trp Asp Ser Ile Ile
                    150
                                        155
Asn Asn Gln Ala Asn Ile Ala Ile Gly Ala Pro Asp Thr Leu Leu Asp
                                    170
Gly Gly Gly Ile Asp Tyr Thr Glu Ile Gly Ala Ile Arg Trp Val Phe
            180
                                185
                                                    190
Ala Ile Ala Pro Thr His Pro Leu Ala Phe Ala Pro Glu Pro Ile Ser
                            200
Glu Ser Gln Leu Arg Leu Tyr Pro Asn Ile Met Val Glu Asp Thr Ala
                        215
                                            220
His Thr Ile Asn Lys Lys Val Gly Trp Leu Leu His Gly Gln Glu Ala
                    230
                                        235
Ile Leu Val Pro Asp Phe Asn Thr Lys Cys Gln Cys Gln Ile Leu Gly
                245
                                    250
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Glu Gly Ile Gly Phe Leu Pro Glu Tyr Met Thr Arg Glu Ala Val Glu

260 265 Asp Gly Leu Leu Val Thr Arg Arg Ile Asn Asn Pro Arg Gln Asp Ser 275 . 280 285 Arg Met Leu Leu Ala Thr Gln His Ala Ala Thr Gly Gln Val Thr Arg 295 300 Trp Ile Lys Gln Gln Phe Gly Pro Glu Gly Val Leu Thr Arg Ile Tyr 310 315 Ser Asp Leu Leu Trp Arg Thr 325 <210> 10132 <211> 171 <212> PRT <213> Enterobacter cloacae <400> 10132 Asn Gln Ile Thr Asp Gly Phe Thr Thr Leu Met Thr Lys Lys Lys Ala His Lys Pro Gly Ser Ala Thr Ile Ala Leu Asn Lys Arg Ala Arg His Glu Tyr Phe Ile Glu Glu Glu Phe Glu Ala Gly Leu Ala Leu Gln Gly 40 Trp Glu Val Lys Ser Leu Arg Ala Gly Lys Ala Asn Ile Gly Asp Ser 55 Tyr Val Ile Leu Lys Asp Gly Glu Ala Phe Leu Phe Gly Ala Asn Phe 70 75 Thr Pro Leu Thr Val Ala Ser Ser His Tyr Val Cys Asp Pro Thr Arg 90 8.5 Thr Arg Lys Leu Leu Asn Lys Arg Glu Leu Glu Ser Leu Tyr Gly 100 105 Arg Ile Asn Arg Glu Gly Phe Thr Val Val Ala Leu Ser Leu Tyr Trp 120 Lys Asn Ala Trp Cys Lys Val Lys Ile Gly Val Ala Lys Gly Lys Lys 135 140 Gln His Asp Lys Arg Thr Asp Leu Lys Ala Arg Glu Trp Gln Leu Asp 150 155 Lys Ala Arg Ile Met Lys Asn Ala Gly Arg 165 <210> 10133 <211> 196 <212> PRT <213> Enterobacter cloacae <400> 10133 Met Gly Pro Thr Thr Lys Gly Pro Lys Ile Glu Gly Pro Lys Met Ala 10 Lys Ile Ala Lys Lys Leu Thr Asp Thr Glu Ile Lys Ser Thr Lys Pro 20 Ala Asp Lys Glu Ile Asn Leu Phe Asp Gly Asp Gly Leu Ile Leu Arg 35 Ile Ala Pro Leu Thr Lys Gly Gly Lys Lys Asn Trp Tyr Phe Arg Tyr Ala Val Pro Val Ser Lys Lys Arg Thr Lys Met Ser Leu Gly Thr Tyr 75 Pro His Leu Thr Leu Ala Arg Ala Arg Thr Leu Arg Asp Glu Tyr Leu Ser Leu Leu Ala Asn Gly Ile Asp Pro Gln Val His Asn Ser Asn Lys 105 Ala Asn Ala Leu Lys Asn Ala Thr Glu His Thr Leu Gln Ala Val Ala

5619 Arg Lys Trp Leu Asp Glu Lys Val Lys Thr Ser Gly Ile Ser Gln Asp 135 140 His Ala Glu Asp Ile Trp Arg Ser Leu Glu Arg Asn Ile Phe Pro Gly 150 155 Leu Gly Asn Val Pro Val Asn Glu Ile Arg Pro Lys Leu Leu Lys Gln . 165 170 His Leu Asp Pro Ile Glu Gln Arg Gly Val Leu Glu Thr Glu Ser Pro 185 180 Arg Ile Ile 195 <210> 10134 <211> 258 <212> PRT <213> Enterobacter cloacae <400> 10134 Arg Arg Leu Asp Gly Tyr Val Arg Asp Ala Met Glu Tyr Pro Leu Leu

Asp Asn Thr Asp Leu Pro Leu Val Leu Leu Gly Gly Thr Leu Cys Asn Val Arg Leu Trp Gln Pro Val Ile Glu Arg Leu Asn Ile Ser Ala Val 40 Leu Cys Ile Thr Leu Thr Gly Ala Glu Ser Ala Pro Gln Ala Ser Arg 55 Arg Leu Leu Lys Val Leu Pro Pro Arg Phe Leu Leu Ala Gly Phe Ser 70 75 Leu Gly Ala Ile Val Ala Leu Gln Met Ala Ala Asp Ala Pro Glu Arg 8.5 90 Val Asn Gly Leu Thr Leu Ile Ser Val Asn Pro Leu Pro Val Ala Pro 105 100 Asp Thr Leu Ala Ser Arg Arg Glu Ala Val His Thr Ala Gln Ala His 120 125 Gly Leu Ala Asp Trp Leu Val Ser Ser Leu Trp Gln Ser Tyr Val Ala 135 140 Pro Ser Arg Leu Ser Asp Arg Ile Leu Gln Glu Thr Ile Cys Arg Met 150 155 Ala Gln Glu Cys Gly Ile Glu Thr Phe Ala Gly Gln Thr Glu Met Ala 165 170 Ile His Arg Gln Asp Asn Arg Thr Ala Phe Asn Ala Leu Ala Cys Pro 185 180 190 Thr Leu Leu Asn Gly Ala Gln Asp Val Ile Cys Thr Pro His His 200 205 His Gln Leu Leu Ala Ala Gly Asn Ala Asn Val Thr Arg His Thr Val 215 220 Glu Ala Gly Gly His Phe Ile Pro Leu Glu Thr Pro Asp Glu Ile Ala 230 235 Pro Leu Leu Arg Gln Trp Ile Thr Glu Cys Ile Gln Cys Ala Lys Thr 250

<210> 10135

Val

<211> 102 <212> PRT

<213> Enterobacter cloacae

<400> 10135

Arg His Val Val Gly Phe Ser Thr Ser Leu Phe Ile Ser Thr Gly Ala  $1 \\ 5 \\ 10 \\ 15$  Ile Trp Leu Met Gly Arg Arg Val Leu His Ala Lys Lys Phe Leu Val

20 Phe Tyr Leu Asp Ser Val Asn Lys Ser Ile Trp Gln Phe Leu Ile Thr 40 45 Leu Gln Ile Leu Leu Ser Val Val Asn Ser Tyr Phe Ser Ala Cys Lys 55 60 Gln Ser Ser Phe Asn Leu Ser Gly Ile Ile Ser Ser Ala Ile Tyr Thr 70 75 Tyr Phe Thr Phe Cys Leu Arg Thr Leu Phe Ser Val Leu Arg Ser Leu 90 85 Ser Val Thr Gly Leu 100 <210> 10136

<211> 759

<212> PRT

<213> Enterobacter cloacae

<400> 10136 Ala Phe Tyr Met Ala Ser Leu Ser Arg Arg Pro Asp Ala Leu Arg Pro 10 Gly Cys Ala Ala Glu His Arg Arg Leu Lys Met Ile Arg Leu Leu 25 Leu Leu Ala Ile Ser Pro Leu Leu Ala Gln Ala Ser Gln Pro Val Thr Trp Ser Leu Ala Gly Met Trp Arg Val His Asp Ala Asn Leu Ser Thr 55 Phe Asp Gly Ala Ser Ala Pro Asp Arg Asp Trp Arg Ser Ile Ala Val 70 7.5 Pro Ala Asn Trp Tyr Ser Ala Gly Tyr Asp His Gln Gly Ala Leu Trp 85 90 Tyr Arg His Glu Phe Thr Leu Pro Arg Arg Ala Pro Asp Thr Met Ala 100 105 110 Thr Leu Val Phe Asp Gly Val Asp Tyr Phe Ala Asp Val Thr Leu Asn 120 Gly Arg His Leu Ala His His Glu Gly Tyr Phe Gln Arg Phe Ser Val 135 140 Asp Ile Ser Asp Ala Leu Gln Arg His Asn Lys Leu Ala Val Arg Val 150 155 Asp Ser Pro Trp Glu Asp Pro Lys Thr Ile Trp Pro Leu His Lys Thr 165 170 Met Val Lys Gly Val Leu Asn Gln His Asp Thr Arg Pro Gly Gly Ala 180 185 Trp Ser Glu Asp Gly Gln Asp Ala Asn Ser Gly Gly Ile Trp Ser Pro 200 Val Lys Leu His Leu Ser Arg Gly Val Thr Ile Asp Glu Val Ile Leu 215 220 Arg Pro Asp Trp Arg Glu Gly Leu Ser Lys Pro Ala Leu His Ala Glu 230 235 Ile Arg Tyr Arg Ala Leu Ser Ala Gly Asp Val Thr Leu Arg Leu Ser 250 Ala Thr Pro Asp Asn Phe Thr Gly Pro Pro Val Lys Gln Glu Phe Pro 265 Val Asn Leu Ala Arg Thr Asp Gly Lys Pro Gln Ser Leu Arg Val Thr 280 285 Leu Pro Met Gln Gly Ala Arg Leu Trp Trp Pro Val Gly Tyr Gly Arg 295 300 Pro Asn Leu Tyr Arg Val Arg Ala Thr Leu Thr Asp Lys Gln Gly Val 310 315 Met Asp Thr Ala Val Ala Arg Thr Gly Leu Arg Lys Ile Val Lys Gln 330 Pro Asp Asn Lys Gly Trp Leu Phe Asn Asp Lys Arg Leu Phe Ile Lys

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340
                                345
Gly Ser Asn Tyr Ile Gly Ser Pro Trp Leu Ser Thr Met Thr Arg Lys
                            360
                                               365
Lys Tyr Arg Arg Asp Phe Arg Leu Val Gln Ala Met Asn Ala Asn Ala
                       375
                                            380
Ile Arg Val His Ser His Val Ala Gly Arg Ala Leu Tyr Asp Val Ala
                   390
                                       395
Asp Glu Met Gly Leu Met Ile Trp Gln Asp Val Pro Leu Gln Trp Gly
                405
                                   410
Tyr Asn Asn Ser Asp Ala Phe Ala Asp Asn Ala Val Arg Gln Thr Arg
                                425 '
Glu Met Val Glu Gln Phe Gly Asn Ser Pro Ala Ile Ile Val Trp Gly
                            440
Gly His Asn Glu Pro Pro Trp Asn Ser Pro Trp Met Glu Lys Arg Phe
                        455
Pro Asp Trp Asn Lys Asn Leu Asn Gln Thr Leu Thr Lys Arg Val Gly
                    470
                                        475
Asp Ala Leu Ser Gln Asp Thr Ser Arg Ile Val His Arg Phe Ser Ala
                485
                                    490
Val Glu Glu His Tyr Trp Ala Gly Trp Tyr Phe Gly Thr Met Arg Asp
                                505
Leu Leu Gly Pro Ala Lys Thr Ala Ile Ile Thr Glu Phe Gly Ala Gln
                            520
Ala Leu Pro Arg Leu Ser Thr Leu Lys Thr Ile Ile Pro Ala Arg Leu
                        535
                                            540
Met Trp Pro Lys Ser Thr Ala Ala Asp Asp Pro Gly Trp Thr His Trp
                    550
                                        555
Lys Tyr His Asn Phe Gln Pro Phe Gln Thr Phe Lys Phe Ala Asn Ile
                                    570
Pro Arg Gly Asn Thr Ile Gln Glu Met Ile Ala Asn Thr Gln Arg Tyr
                                585
Gln Ala Glu Leu Val Ala Met Ala Ala Glu Ser Tyr Arg Arg Gln Arg
                            600
Tyr Gln Pro Val Thr Ala Leu Phe His Phe Met Phe Val Glu Thr Trp
                        615
                                            620
Pro Ser Ile Asn Trp Gly Val Val Asp Tyr Leu Arg Lys Pro Lys Ala
                    630
                                        635
Gly Tyr Tyr Ala Leu Gln Lys Ala Tyr Gln Pro Ile Leu Pro Ser Ile
                                    650
                645
Glu Pro Val Thr Ala Val Trp Arg Gln Gly Ser Glu Ala Thr Val Arg
                                665
            660
Leu Trp Ala Ile Asn Asp Thr Trp Ser Ala Cys Glu Ala Cys Arg Leu
                            680
        675
Lys Trp Gln Val Lys Gln Asn Gly Arg Val Leu Ala Lys Gly Asn Thr
                        695
                                            700
Ser Leu Thr Leu Pro Pro Asp Ser Gly Ser Arg Ile Lys Asp Ile Thr
                    710
                                        715
Val Thr Pro Thr Thr Arg His Asn Val Thr Ile Glu Tyr Glu Ile Ser
                                    730
Asp Arg Ala Gly Asn Thr Val Gly Ser Asn Gln Arg Asn Glu Arg Val
            740
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Glu Ser Pro Pro Glu Gln
       755
<210> 10137
<211> 3839
<212> PRT
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<400> 10137

<213> Enterobacter cloacae

Thr Val Phe Ser Pro Gly Ala Arg Ser Ser Leu Gln Lys Arg Trp Leu

10 Cys Phe Thr Arg Arg Asn Gln Ser Leu Ser Trp Ser Asn Asn Cys Met 25 Ser Gln Ile Ser Val Ile Ser Lys Leu Thr Gly Val Glu Thr Thr 40 Glu Gly Thr Gln Ile Thr Leu Asp His Ser Ser Ile Val Lys Leu Asn 55 60 Val Asp Arg Ala Asp Ile Ser Gly Tyr Ser Arg Ser Gly Asn Asp Leu 70 75 Val Ile Thr Leu Asn Ser Gly Glu Val Ile Thr Leu Lys Asn Phe Tyr 85 90 Val Thr Asp Ala Gln Gly Val Ser Gln Leu Val Leu Glu Glu Ser Asp 105 Gly Ala Leu Trp Trp Ile Glu Asp Pro Thr Gly Ala Ala Thr Tyr Glu 120 Ser Ile Ala Ser Thr Asp Ala Leu Leu Ala Ala Ser Gly Ser Asp Ala 135 140 Gly Gly Ala Ala Ala Trp Pro Trp Val Leu Gly Gly Leu Ala Ala Ala 150 155 Gly Gly Ile Ala Ile Ala Ala Gly Thr Gly Gly Gly Gly Gly Asp 165 170 Asp Asp Asn Asn Ser Pro Asn Pro Gly Asn Pro Gly Asn Pro Ser Glu 180 185 Pro Asp Thr Thr Pro Pro Asp Ala Pro Thr Asn Leu Gln Val Ser Pro 200 Asp Gly Lys Thr Val Thr Gly Thr Ala Glu Pro Gly Ser Thr Ile Thr 215 220 Leu Lys Asp Ala Asp Gly Asn Thr Ile Gly Thr Gly Lys Ala Gly Ser 230 235 Asp Gly Lys Phe Thr Ile Asp Leu Gly Thr Pro Leu Thr Asn Gly Glu 245 250 Gln Ile Thr Ala Thr Ala Thr Asp Pro Ser Gly Asn Thr Ser Gln Gly 260 265 Gly Gln Val Thr Ala Pro Asp Leu Thr Ala Pro Asp Ala Pro Ala Asn 275 280 Leu Glu Val Ser Pro Asp Gly Lys Thr Val Thr Gly Thr Ala Glu Pro 295 300 Gly Ser Thr Val Thr Leu Lys Asp Ala Asp Gly Asn Thr Ile Gly Thr 310 315 Gly Lys Ala Gly Ser Asp Gly Lys Phe Thr Ile Asp Leu Gly Thr Pro 325 330 Leu Thr Asn Gly Glu Gln Ile Thr Ala Thr Ala Thr Asp Pro Ser Gly 340 345 Asn Thr Ser Pro Gly Val Gln Val Thr Ala Pro Asp Leu Thr Ala Pro 360 Asp Ala Pro Glu Ile Val Thr Val Asn Asp Asn Val Gly Ala Glu Thr 375 Gly Pro Leu Ser Asn Gly Gln Arg Thr Asp Asp Ala Arg Pro Thr Phe 390 395 Ser Gly Ile Ser Glu Ala Gly Thr Val Ile Thr Phe Tyr Asp Asn Gly 410 Lys Pro Ile Gly Thr Ala Thr Ala Asp Ala Thr Gly Lys Trp Ser Phe 425 420 430 Thr Pro Ser Thr Asn Leu Ser Glu Gly Asn His Ala Ile Thr Thr Thr 440 Ala Thr Asp Ala Ala Gly Asn Thr Ser Pro Ala Ser Thr Ala Val Ser 455 460 Phe Val Val Asp Thr Val Ala Pro Gly Ala Pro Ala Ile Val Ser Ile 470 475 Thr Asp Asp Val Ala Pro Gly Thr Gly Thr Leu Gly Ser Gly Ser Ser 490

Thr Asn Asp Pro Arg Pro Gln Leu Thr Gly Thr Ala Glu Ala Gly Ser 505 500 Thr Ile Thr Ile Tyr Asp Asn Gly Ile Ala Ile Gly Thr Ala Ile Val 520 525 Gly Ser Asn Gly Ser Trp Ser Phe Thr Pro Ser Val Asn Leu Ser Glu 535 540 Gly Ser His Gln Leu Thr Val Arg Ala Thr Asp Val Ala Gly Asn Thr 550 555 Gly Pro Ala Ser Pro Val Phe Thr Val Thr Val Asp Val Thr Ala Pro 565 570 Gln Thr Pro Ser Gly Phe Ile Ile Asn Asp Asp Thr Gly Val Leu Lys 585 Gly Ala Ile Gly Ala Gly Gln Phe Thr Asp Ala Ser Glu Pro Arg Leu 600 Thr Gly Arg Gly Glu Pro Gly Ser Thr Ile Thr Val Tyr Asp Asn Gly 615 Val Val Ile Gly Thr Thr Val Leu Pro Asn Gly Thr Trp Ser Ile 630 635 Thr Pro Thr Ser Pro Leu Ala Glu Gly Ala His Ser Ile Thr Leu Arg 645 650 Glu Thr Asp Ala Ala Gly Asn Gln Ser Gly Leu Ser Gln Pro Ile Asn 660 665 Phe Thr Val Asp Leu Thr Pro Pro Asp Met Pro Val Ala Thr Leu Asn 680 675 685 Ser Ala Gly Thr Gln Ile Thr Gly Thr Ala Glu Pro Gly Ser Lys Ile 695 700 Val Ile Thr Asn Asn Ala Gly Leu Gln Ile Gly Thr Ala Thr Ala Asp 710 715 Ser Asn Gly Asn Tyr Val Val Asn Leu Asn Pro Ala Gln Thr Asn Gly 725 730 Glu Ile Ile Ser Val Val Ala Ser Asp Ala Ala Gly Asn Gln Ser Ser 740 745 Pro Ala Leu Val Asn Ala Ala Asp Ile Thr Pro Pro Ala Ala Pro Gly 760 765 Asn Leu Val Val Ala Glu Asp Gly Ala Ser Val Ser Gly Thr Ala Glu 775 780 Pro Asn Ser Thr Ile Ile Ile Lys Ala Pro Asp Gly Thr Ile Ile Gly 790 795 Gln Ala Thr Ala Gly Pro Asp Gly Thr Phe Thr Ile Pro Ile Ser Pro 805 810 Ala Gln Thr Asn Gly Glu Ala Leu Glu Val Thr Ala Thr Asp Gly Ser 825 820 830 Gly Asn Thr Ser Pro Ser Gly Phe Ala Asp Ala Pro Asp Ser Thr Pro 840 845 Pro Leu Ala Pro Glu Asn Val Val Ile Ser Ala Asp Gly Thr Thr Val 855 860 Thr Gly Thr Ala Glu Pro Gly Ser Thr Val Thr Ile Arg Glu Asn Gly 870 875 Val Lys Val Gly Glu Thr Val Ala Asp Asp Gln Gly Asn Phe Ser Val 885 890 Glu Leu Ile Pro Pro Lys Ala Asn Gly Glu Ala Leu Thr Ala Asp Ala 905 Thr Asp Thr Ala Gly Asn Thr Gly Pro Thr Ala Pro Phe Asp Ala Pro 920 Asp Ile Thr Ala Ala Gln Thr Pro Val Ile Thr Gly Val Val Asp Asp 935 940 Ala Pro Gly Val Thr Gly Pro Val Ser Gln Asn Gly Leu Thr Asn Asp 950 955 Asn Thr Pro Thr Ile Asn Gly Thr Gly Glu Pro Gly Thr Thr Ile Thr 970 Leu Tyr Ser Gly Thr Thr Val Leu Gly Thr Ala Leu Val Ser Ala Asn

Gly Gln Trp Ser Ile Thr Leu Gln Thr Ala Leu Pro Asp Gly Gly His Val Leu Thr Ala Thr Ala Val Asp Ala Asn Asn Asn Leu Ser Gly Thr Ser Asn Thr Trp Ser Ile Thr Val Asp Thr Ala Ala Pro Gly Ala Pro 1030 1035 Ala Ile Thr Gln Val Ile Asp Asp Val Pro Gly Arg Thr Gly Ala Leu Asp Thr Asn Glu Thr Thr Asn Asp Thr Leu Pro Thr Leu Asn Gly Thr Gly Glu Pro Gly Ser Thr Val Thr Ile Arg Leu Asp Gly Gln Asp Ile Gly Thr Ala Val Val Asn Ser Gly Gly Ala Trp Thr Phe Thr Pro Ala Thr Pro Leu Val Asn Gly Gln His Thr Phe Thr Val Val Ala Ser Asp Ala Ala Gly Asn Ala Ser Ala Pro Ser Ala Gly Phe Thr Leu Thr Val Asp Thr Thr Pro Pro Pro Ala Ala Thr Ile Asp Thr Val Ser Asp Asn Val Gly Pro Val Gln Leu Pro Leu Asn Ser Gly Asp Thr Thr Asp Asp Thr Leu Pro Gln Leu Gln Gly Thr Ala Pro Asp Gly Thr Thr Ile Thr Ile Tyr Asp Gly Thr Thr Leu Leu Gly Thr Ala Val Leu Asp Gly Ser Gly Gly Trp Ser Phe Thr Pro Thr Thr Pro Leu Thr Asp Gly Pro His Ser Leu Thr Val His Ala Thr Asp Glu Ala Gly Asn Thr Thr Ile Ser Pro Pro Phe Glu Leu Ala Ile Asn Thr Thr Ala Pro Ala Thr Pro Asp Ile Pro Glu Ile Thr Val Asn Pro Asp Gly Gly Thr Pro Gly Thr Ala Leu Asn Pro Gly Glu Thr Thr Arg Asp Thr Thr Pro Thr Leu Ser Gly Ser Gly Thr Pro Gly Asp Ile Val Asn Ile Tyr Asp Gly Ala Thr Lys Ile Gly Glu Ala Glu Ile Asp Gly Asp Gly Asn Trp Ser Trp Thr Pro Asp Asp Pro Leu Pro Asp Gly Thr Tyr Asp Leu Ser Leu Thr Val Thr Asn Gln Asp Ser Ala Gly Asn Glu Ser Ala Pro Ser Thr Pro Val Thr Ile Thr Ile Asp Thr Asp Ala Pro Ala Gln Pro Gly Thr Pro Thr Val Thr Asp Ser Val Ser Gln Ile Thr Gly Pro Val Leu Asp Gly Glu Ser Thr Asn Asp Pro Arg Pro Val Leu Ser Gly Thr Gly Thr Pro Asn Asp Val Ile Thr Ile Tyr Asp Gln Val Gly Thr Gly Glu.Pro Gln Ala Val Gly Ser Val Thr Val Asp Gly Asn Gly Asn Trp Ser Trp Arg Pro Glu Ser Asn Ile Gly Glu Gly Thr His Glu Tyr Thr Ala Thr Ala Thr Asp Glu Ala Gly Asn Glu Ser Val Pro Ser Ala Gly Ile Thr Ile Thr Val Asp Thr Leu Ala Pro Asp Thr Pro Val Ile Ser Ala Ile Gly Gly Val 

Gln Asn Gly Glu Ser Thr Asn Asp Thr Thr Pro Gly Ile Gly Gly Thr Gly Thr Thr Gly Glu Thr Val Ile Ile Tyr Asn Asn Gly Val Glu Val Ala Arg Val Glu Val Val Asn Asn Glu Trp Ser Tyr Thr Leu Pro Thr Gln Thr Asp Gly Pro Leu Asn Ile Thr Val Ala Ala Val Asp Asp Ala Gly Asn Val Ser Pro Val Ser Pro Val Phe Thr Val Glu Val Asp Thr Gln Ala Pro Thr Val Pro Gln Ile Asp Ala Val Ser Asp Ser Gln Leu Thr Asn Ser Val Leu Tyr Thr Arg Asp Gly Thr Pro Thr Leu Thr Gly Ile Gly Glu Pro Gly Ser Ser Val Thr Val Ser Val Asp Gly Val Ala Ser Pro Val Val Glu Val Gln Pro Asn Gly Thr Trp Ser Trp Thr Ala Asp Pro Ala Leu Thr Glu Gly Pro His Thr Phe Ser Val Val Ala Ser Asp Ala Ala Gly Asn Thr Ser Ala Ser Ser Gly Asp Leu Ser Val Thr Val Asp Thr Leu Pro Pro Ala Thr Pro Thr Asn Met Thr Ile Ala Ala Glu Gly Thr Pro Leu Thr Gly Thr Ala Asp Asp Gly Thr Thr Val Thr Val Arg Asp Ala Asn Gly Asn Ile Ile Gly Thr Gly Val Ala Thr Gly Ser Phe Tyr Ile Ala Leu Ser Pro Ala Gln Leu Asp Ala Ala Thr Leu Thr Leu Ile Ala Thr Asp Pro Ala Gly Asn Ala Ser Ser Ser Thr Thr Phe Asp Val Pro Asp Ser Pro Leu Glu Leu Pro Ala Val Pro Val Ile Thr Ala Ile Asn Asp Asp Val Asp Pro Val Thr Gly Asp Val Lys Asp Lys Thr Thr Asn Asp Thr Thr Pro Thr Leu Thr Gly Thr Ala Asp Pro Gly Ser Val Ile Ala Ile Tyr Gln Asp Gly Ser Leu Leu Pro Val Thr Thr Val Val Ala Asp Thr Asn Gly Asn Trp Ser Tyr Thr Pro Leu Leu Pro Leu Thr Glu Gly Pro His Thr Phe Ala Val Thr Ala Thr Asn Thr Thr Gly Ala Thr Ser Gly Gln Ser Pro Val Ala Thr Val Thr Val Asp Leu Thr Ala Pro Thr Ala Pro Ala Ile Gly Ala Val Thr Asp Asp Val Gly Pro Ile Thr Gly Pro Ile Ala Asp Gly Gln Ser Thr Asn Asp Asn Arg Pro Thr Leu Thr Gly Thr Gly Thr Ala Gly Asp Thr Ile Thr Val Tyr Asp Asn Gly Asp Pro Leu Gly Thr Val Ile Val Gly Pro Thr Gly Thr Trp Ser Tyr Thr Pro Pro Val Leu Asp Asp Gly Ser His Thr Leu Thr Val Thr Ala Thr Asp Pro Ala Gly Asn Glu Ser Thr Pro Ser Ala Gly Ile Thr Ile Val Val Asp Thr Val Ser Thr Thr Pro Val Ile Thr Ser Val Thr Asp Asn Ala Gly Asn Ala Ala Thr Pro Val

Pro Ser Gly Asp Pro Thr Asn Asp Thr Thr Pro Thr Leu Thr Gly Thr Ala Glu Pro Asn Ser Val Val Ala Ile Phe Asp Gly Thr Thr Gln Ile Gly Thr Val Ala Ala Asp Gly Thr Gly Ala Trp Thr Phe Thr Pro Glu 2005 2010 Thr Ala Leu Gly Glu Gly Thr His Asp Phe Thr Val Arg Ala Thr Asp Pro Gln Gly Asn Val Ser Gln Pro Ser Asn Ala Trp Ser Val Glu Ile Asp Leu Thr Ala Pro Gln Val Pro Thr Ile Val Thr Val Ser Asp Asn Ala Pro Gly Gly Val Thr Gly Pro Leu Thr Ala Gly Gln Val Thr Asn Asp Thr Thr Pro Thr Leu Ser Gly Thr Gly Gln Ala Gly Thr Thr Ile His Val Leu Asn Asn Gly Val Glu Ile Gly Thr Thr Thr Val Asp Gly Asn Gly Asn Trp Thr Phe Thr Pro Asp Pro Val Leu Thr Asp Gly Thr Tyr Asn Leu Arg Val Asn Ala Ser Asp Asp Val Gly Asn Val Ser Ala Asn Ser Pro Val Phe Ala Phe Thr Val Asp Thr Thr Gly Pro Ala Ala Pro Val Val Thr Thr Val Ile Asp Asp Val Ser Pro Gly Thr Gly Ile Ile Ala Ser Asn Gly Ser Thr Asn Asp Thr Arg Pro Thr Phe Asn Gly Thr Gly Glu Val Gly Ala Thr Val His Val Ile Val Asp Asp Val Glu Ile Gly Thr Ala Val Val Asn Ala Gln Gly Asn Trp Thr Phe Thr Pro Thr Thr Ala Leu Gly Glu Gly Pro His Thr Ile Thr Phe Asn Ala Thr Asp Ala Ala Gly Asn Thr Gly Val Thr Ser Pro Pro Phe Asn Leu Thr Val Asp Thr Ser Val Pro Asp Ala Pro Val Phe Thr Pro Ala Thr Asp Asn Ala Gly Pro Val Leu Gly Pro Val Ala Ser Gly Gln Ser Thr Asp Asp Thr Thr Pro Thr Leu Asn Gly Thr Ala Ala Ala Asn Ala Thr Ile Thr Ile Tyr Glu Asn Gly Gln Pro Val Gly Thr Ala Val Ala Asp Ala Asn Gly Val Trp Ser Phe Thr Thr Gly Thr Leu Ala Asn Gly Ser His Thr Trp Thr Ala Thr Ala Thr Asp Ala Ala Gly Asn Ile Ser Pro Ala Ser Pro Gly Phe Thr Leu Val Val Asp Thr Thr Val Pro Ala Ala Pro Val Ile Thr Gln Ala Ile Asp Asp Val Gly Thr Ile Thr Gly Ala Ile Gly Ser Gly Gln Thr Thr Asn Asp Pro Leu Pro Arg Leu Val Gly Thr Ser Glu Pro Leu Ala Thr Val Asn Ile Tyr Glu Gly Thr Thr Leu Val Gly Thr Gly Thr Ala Asp Ala Asn Gly Asn Trp Thr Val Asp Ile Thr Val Pro Leu Gly Thr Gly Ser His Thr Phe Thr Ala Glu Ala Thr Asp 

Gln Ala Gly Asn Thr Gly Ala Pro Ser Ala Asp Phe Ser Leu Ile Ile 2455 2460 Asp Thr Thr Pro Pro Ala Leu Pro Val Leu Thr Ser Val Thr Asp Asp 2470 2475 Val Gly Asn Ala Ala Thr Pro Val Ala Asn Gly Gly Leu Thr Asn Asp . 2490 2485 Ala Arg Pro Thr Leu Thr Gly Thr Ala Glu Ala Gly Ala Thr Val Thr . 2500 2505 Ile Tyr Asp Asn Gly Val Gln Ile Gly Thr Ala Val Ala Thr Gly Gly 2520 Ala Trp Ser Phe Thr Pro Ser Thr Pro Leu Ala Asp Gly Pro His Asn 2535 2540 Leu Thr Phe Ser Ala Thr Asp Ala Val Gly Asn Ala Ser Ala Gln Thr 2550 2555 Gly Gly Tyr Thr Ile Asn Val Asp Ala Thr Ala Pro Val Ala Pro Ala 2565 2570 Ile Thr Ser Ile Val Asp Asp Val Gly Thr Val Thr Gly Pro Val Thr 2585 2580 Gly Thr Asn Pro Thr Asn Asp Thr Arg Pro Thr Leu Asn Gly Thr Ala 2600 2605 Glu Ala Asn Ala Thr Val Arg Ile Tyr Asp Gly Thr Thr Leu Val Gly 2615 2620 Thr Val Thr Ala Asp Ala Asn Gly Asn Trp Thr Leu Pro Gln Thr Ser 2630 2635 Thr Thr Leu Ile Glu Gly Glu His Asn Phe Thr Ala Thr Ala Thr Asp 2650 . 2645 Ala Ala Gly Asn Thr Ser Ala Pro Ser Pro Ile Ile Thr Ile Asn Val 2660 2665 2670 Asp Leu Thr Pro Pro Ala Ala Pro Thr Gly Leu Ala Val Ile Thr Asn 2675 2680 2685 Gly Thr Gln Val Thr Gly Thr Ala Glu Ala Gly Ser Thr Val Thr Ile 2690 2695 2700 Thr Ser Ser Thr Gly Thr Val Leu Gly Thr Ala Val Ala Asp Gly Ser 2710 2715 Gly Asn Phe Ser Ala Thr Leu Thr Pro Pro Gln Thr Gly Gly Glu Ser 2725 2730 Leu Ile Val Phe Ala Thr Asp Lys Ala Gly Asn Ala Gly Ile Thr Thr 2740 2745 2750 Ser Val Ile Ala Pro Ile Thr Thr Ile Pro Asn Ala Pro Val Ile Ala 2755 2760 2765 Asn Ile Asp Asp Asn Val Gly Thr Val Thr Gly Asn Leu Thr Asn Gly 2775 2780 Lys Thr Thr Asp Asp Thr Thr Pro Thr Leu Ser Gly Thr Ala Gln Pro 2790 2795 Asn Ala Thr Ile Thr Leu Tyr Asn Asn Gly Val Leu Met Gly Thr Val 2805 2810 Thr Ala Asn Ala Ser Gly Asn Trp Ser Phe Thr Thr Pro Val Leu Ser 2820 2825 Glu Gly Pro His Ala Phe Thr Ala Thr Ala Ser Asn Gly Ser Gly Thr 2835 2840 2845 Ser Pro Ile Ser Thr Ser Thr Thr Val Ile Val Asp Leu Thr Ala Pro 2855 2860 Thr Ala Pro Thr Gly Thr Phe Asn Ala Asp Gly Ser Val Leu Thr Gly 2870 2875 Ser Ala Glu Ala Gly Ser Thr Val Thr Ile Arg Leu Ala Asp Asn Ser 2890 2885 Thr Val Thr Ala Thr Ala Asp Ser Asn Gly Ser Trp Ser Tyr Thr Phe 2900 2905 2910 Leu Asn Lys Gln Thr Glu Gly Gln Thr Leu Gln Ile Thr Ala Thr Asp 2920 2925 Ala Ala Gly Asn Val Ser Leu Pro Gly Ser Ala Leu Ala Pro Val Val

Pro Leu Ser Ala Ser Thr Asn Val Glu Glu Leu Ala Leu Thr Thr Ala Thr Val Thr Asn Ser Gln Tyr Ser Asp Tyr Gly Phe Leu Leu Val Gly Ala Val Gly Asn Val Leu Thr Leu Leu Gly Asn Asp Thr Ala Gln Val Gly Phe Thr Val Gly Asn Gly Gly Ser Ala Asp Ile Ala Val Asn Ala Asn Ala Thr Gly Ala Val Leu Ser Leu Leu Asn Thr Leu Glu Leu Val Val Gln Arg Phe Asp Ala Ala Asn Asn Thr Trp Thr Thr Val Val Asp Thr Gly Gln Pro Gln Phe Ala Asp Leu Leu Thr Leu Gly Ala Thr Gly Val Ser Leu Asn Leu Thr Gly Leu Ala Asp Gly Gln Tyr Arg Val Leu Ser Tyr Asn Thr Asn Leu Leu Ala Thr Gly Ser Tyr Thr Ser Leu Asp Val Ala Val Lys Glu Thr Ser Ala Gly Thr Val Ser Gly Glu Thr. Asn Ile Val Gly Asn Val Ile Thr Asp Val Asp Pro Thr Ala Gly Ser Asp Asn Ala Pro Ala Gly Thr Thr Val Thr Ala Val Thr Asn Ala Gln Gly Ser Thr Thr Ser Val Thr Ala Asp Gly Thr Val Ile Gln Gly Gln Tyr Gly Thr Leu Thr Ile Asn Leu Asp Gly Ser Tyr Thr Tyr Asn Leu Thr Asn Thr Ser Ala Ala Val Ile Gly Arg Thr Glu Asn Phe Thr Tyr Thr Ile Thr His Asn Gly Thr Ser Ala Ser Ala Asn Leu Val Leu Ser Leu Gly Glu Gly Thr Ser Ser Gly Ile Val Ala Val Asp Asp Thr Ala Ser Leu Thr Phe Asp Thr Thr Val Glu Ala Ile Asn Asn Gly Thr Ser Ser Gln Gly Gly Phe Thr Leu Val Gly Ile Asn Leu Gly Asn Thr Leu Gly Leu Asn Leu Leu Asp Asp Leu Ala Asn Pro Ile Ile Tyr Asn Val Glu Glu Gly Thr Thr Arg Thr Met Thr Val Gln Ala Ser Val Gly Gly Val Ala Leu Ala Ser Val Phe Asp Leu Tyr Ile Tyr Lys Phe Asn Asn Ala Thr Gln Thr Phe Glu Gln Met Arg Val Glu Pro Gly Trp Leu Arg Ala Pro Leu Leu Gly Gly Thr Ser Pro Gln Leu Thr Leu Asn Leu Pro Ala Gly Glu Tyr Leu Phe Leu Leu Asn Thr Ala Ala Gly Ile Thr Ala Leu Thr Ala Tyr Thr Leu Asn Val Leu Gln Asp His Val Tyr Ser Val Ala Ser Val Ser Glu Ser Thr Thr Gly Asp Val Leu Ala Asp Asp Ile Ala Pro Ala Gly Thr Val Val Ser Asp Val Asn Gly Val Ala Val Asn Ser Ser Gly Leu Thr Glu Ile Thr Gly Glu Tyr Gly Thr Leu Arg Ile Asn Ala Ala Gly Glu Tyr Thr Tyr Thr Leu Asn Ser Gly Val Gly 

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Ala Asp His Ile Ser Thr Pro Asp Thr Phe Val Tyr Thr Ile Thr Ala
                  3430
                                      3435
Pro Asp Gly Ser Lys Asp Thr Ala Ser Leu Asn Ile Thr Pro Thr Ala
                             3450
               3445
Arg Pro Met Asp Ala Val Asn Asp Val Ser Thr Ala Met Asp Val Thr
                                                  3470
           3460
                              3465
Thr Val His His Thr Ala Ala Tyr Ser Asp Thr Thr Val Gly Ser Ala
                           3480
                                               3485
Ser Trp Asn Ala Ala Leu Leu Ala Ser Thr Gln Gly Ser Gly Ser Gly
                       3495
                                           3500
Thr Phe Val Val Asp Pro Asn Thr Ala Leu His Asn Val Val Leu Ser
                   3510
                                       3515
Phe Asn Val Ala Ser Leu Leu Thr Leu Thr Gly Leu Thr Val Asp Trp
               3525
                                   3530
Thr Leu Ser Asn Gly Ala Thr Thr Val Arg Thr Gly Ser Phe Asn Gly
                               3545
Gly Leu Leu Gly Gly Thr Ala Thr Ile Asn Leu Thr Gly Leu Asp
                           3560
                                               3565
Leu Glu Ala Gly Thr Tyr Thr Leu Ser Tyr Thr Gly Lys Met Gly Pro
                                           3580
                       3575
   3570
Leu Gly Val Gly Asn Ile Thr Ile Thr Pro Ser Val Thr Gly Thr Ser
                   3590
                                       3595
Tyr Ser Leu Ser Gln Phe Asp Ala Thr Gly Thr His Thr Val Asp Gly
               3605
                                   3610
Asn Ile Phe Asp Gly Thr Asp Ser Ala Gly Ala Met Asp Gln Leu His
           3620
                               3625
                                                   3630
Ser Val Asp Thr Arg Val Ser Ile Thr Gly Tyr Asp Gly Val Thr Thr
                           3640
                                               3645
       3635
Thr Leu Asp Pro Tyr Thr Gly Ser Thr Met Ser Asn Ile Thr Gly His
                       3655
                                           3660
Tyr Gly Thr Leu Ala Ile Ala Ala Asp Gly Ser Tyr Thr Tyr Thr Leu
                   3670
                                       3675
Asn Pro Gly Ile Ser Leu Ser Thr Ile Thr Ser Lys Glu Val Phe Asn
                                   3690
               3685
Tyr Thr Leu Thr Asp Ala Asn Gly Val Lys Asp Thr Ala Ser Leu Thr
                               3705
                                                   3710
           3700
Ile Asp Met Ala Pro Lys Phe Val Ser Ser Glu His Asn Asp Val Ile
                           3720
                                               3725
       3715
Ser Gly Thr Ala Tyr Gly Asp Thr Leu Ile Tyr Gln Val Leu Asn Asn
   3730
                       3735
                                           3740
Thr Ala Gly Asn Ala Thr Ala Gly Asn Ser Thr Gly Asp His Trp Thr
                   3750
                                       3755
Asn Phe Ser Leu Thr Gln Gly Asp Lys Ile Asp Ile Gly Asp Leu Leu
               3765
                                   3770
                                                       3775
Val Gly Trp Asn Gly Ser Ala Ser Thr Leu Gly Asn Tyr Val Ser Val
           3780
                               3785
                                                   3790
Ser Gln Ser Gly Asn Asn Thr Val Ile Ser Ile Asp Arg Asp Gly Thr
                           3800
                                               3805
Gly Ala Ala Tyr Thr Lys Ser Thr Leu Val Thr Leu Asp Asn Val Gln
                       3815
                                           3820
Thr Thr Tyr Asp Glu Leu Val Asn Gln Gln His Ile Ile Thr
                   3830
<210> 10138
<211> 742
<212> PRT
<213> Enterobacter cloacae
<400> 10138
Lys Pro His His Pro Asp Arg Gly Asp Pro Ala Met Lys Gln Arg Asp
```

Ile Pro Gln Gly Glu Asn Met Thr Asp Gln Ala Leu Glu Gln Trp Ala 20 25 Gln Ala Phe Gly Tyr Val Ala Thr Arg Tyr Arg Val Ala Cys Ser Pro 40 Gly Ser Leu Val Ala Gly Ala Pro Trp Leu Lys Gly Lys Pro Met Val 55 60 Pro Ala Leu Thr Gln Leu Ala Arg Glu Ala Gly Leu Thr Phe Gln Leu 70 75 Leu Thr Ala Asp Gln Gln Ser Ile Asn Ser Trp Arg Leu Pro Val Val Val Glu Leu Asn Asp Gly Lys Ile Gly Val Ile Asp Asn Phe Asp Gly 105 Glu Asp Thr Leu Glu Val Ser Phe Phe Asp Asp Ser Thr His Thr Asn 120 125 Arg Leu Ser Met Ser Ala Met Leu Pro Ala Ile Arg His Val Ile Ala 135 140 Leu Arg Pro Leu Ala Ala Leu Lys Asp Ser Arg Val Asp Ala Tyr Ile 150 155 Ser Lys Tyr Arg Pro Asp Trp Leu Tyr Arg Leu Val Met Arg Asp Leu 170 165 Arg Pro Tyr Ser Trp Val Met Leu Ala Ala Leu Phe Ile Asn Val Leu 180 185 Ser Leu Ser Gly Ile Val Phe Ser Met Gln Val Tyr Asp Arg Val Ile 200 Pro Ala Gln Ser Tyr Pro Thr Leu Tyr Val Leu Thr Ile Gly Val Leu 220 215 Ile Ala Thr Leu Phe Gly Phe Val Leu Arg Val Ala Arg Gly His Ile 230 235 Met Asp Leu Leu Gly Lys Arg Ser Asp Leu Arg Val Ser Asp Arg Val 250 245 Phe Gly His Ala Leu Arg Leu Arg His Ser Ala Ile Pro Arg Ser Thr 260 265 Gly Ser Phe Ile Ser Gln Leu Arg Glu Leu Glu Gln Ile Arg Glu Met 280 Val Thr Ser Ser Thr Ile Ser Thr Ile Val Asp Leu Pro Phe Phe Ile 295 300 Leu Phe Val Ile Val Leu Ala Ile Ile Ala Pro Gln Leu Ala Trp Ile 310 315 Ala Pro Val Ala Ala Val Ile Met Val Leu Pro Gly Leu Leu Gln 325 330 Lys Lys Leu Ala Glu Leu Ala Lys Gln Ser Ala His Glu Ser Thr Leu 345 Arg Asn Ala Val Leu Val Glu Ser Val Gln Gly Leu Glu Asp Ile Lys 360 Leu Met Gln Ala Glu Asn Arg Phe Leu Gln Gln Trp Asn Ser Tyr Ile 375 380 Gln Ile Thr Ala Glu Ser Gly Leu Arg Thr Arg Glu Leu Thr Gln Asn 390 395 Leu Ile Ser Trp Gly Met Thr Ile Gln Ser Leu Val Tyr Ala Gly Val 405 410 Ile Val Val Gly Ala Pro Met Val Ile Asp Gly Thr Leu Thr Thr Gly 420 425 Ser Val Val Ala Ala Ser Met Leu Ala Ser Arg Met Ile Ala Pro Met 440 Ala Thr Leu Cys Gly Val Leu Ala Arg Trp Gln Gln Val Lys Ala Ala 455 460 Lys Glu Gly Leu Asp Ser Ile Met Gln Leu Pro Thr Glu Asn Gln Arg 470 475 Glu Glu Thr Pro Ile Arg Gln Asp Val Leu Arg Gly His Tyr Leu Phe 490 Glu Gln Ala Gln Phe Arg Tyr His Pro Glu Asp Pro Arg Met Ala Leu

```
500
                                505
Arg Ile Asn Arg Leu Glu Ile Lys Ala Gly Glu Lys Val Ala Ile Leu
                           520
Gly Arg Asn Gly Ala Gly Lys Ser Thr Leu Leu Gln Ala Met Ala Gly
                       535
                                           540
Gly Met Asp Leu Ala Gly Gly Glu Leu Arg Leu Asp Asn Leu Ser Leu
                   550
                                        555
Pro His Leu Asp Val Ala Asp Val Arg Asp Val Gly Phe Met Thr
               565
                                    570
Gln Asn'Ala Arg Leu Phe Tyr Gly Thr Leu Arg Glu Asn Ile Thr Leu
                                585
Gly Met Pro Arg Ala Thr Asp Lys Glu Ile Phe Glu Val Leu Glu Met
                            600
Cys Gly Ala Ala Ser Phe Val Gln Lys Leu Pro Lys Gly Leu Asp Tyr
                       615
                                            620
Pro Ile Met Glu Asn Gly Val Gly Leu Ser Gly Gly Gln Arg Gln Ser
                    630
                                        635
Ile Leu Leu Ala Arg Met Leu Leu Arg Asp Pro Asn Ile Val Leu Met
                                    650
               645
Asp Glu Pro Thr Ala Ser Leu Asp Glu His Thr Glu Arg Glu Phe Ile
                                665
            660
Gln Arg Leu Gly Ala Trp Leu Gly Asn Arg Thr Leu Val Val Ala Thr
                            680
His Arg Val Pro Val Leu Glu Leu Val Glu Arg Val Val Leu Lys
                        695
                                            700
Asp Gly Met Leu Val Met Asp Ala Pro Lys Ala Gln Ala Leu Asn Asn
                   710
                                        715
Ser Arg Met Gln Gln Gln Gln Ala Thr Gly Arg Glu Trp Lys Asn
                                    730
               725
Glu Asn Gln Ser Ala
           740
<210> 10139
<211> 149
<212> PRT
<213> Enterobacter cloacae
<400> 10139
```

Thr Asp Asn Thr Gly Leu Tyr Phe Ala Gly Gln Arg Glu Lys Gln Thr Ile Ser Ile Ser Leu His Thr Ser Thr Arg Asn Thr Ser Glu Ala Ser

20 25

Pro Met Thr Leu Gln Gln Ala Leu Arg Lys Pro Thr Thr Pro Gly Glu

Val Leu Gln Tyr Glu Tyr Leu Glu Pro Leu Asn Leu Lys Ile Asn Asp 55

Leu Ala Glu Met Leu Asn Val His Arg Asn Thr Val Ser Ala Leu Val

Asn Asn Asn Arg Lys Leu Thr Ala Asp Met Ala Ile Lys Leu Ala Lys 85

Ala Leu Asn Thr Thr Ile Glu Phe Trp Leu Asn Leu Gln Leu Asn Val 105

Asp Ile Trp Glu Ala Gln Ser Asn Ser Arg Thr Gln Glu Glu Leu Ser 120 125

Arg Ile Lys Thr Val Ala Glu Val Met Ala Lys Arg Lys Ser Gly Lys 130 135

Pro Asp Val Ala

145

<210> 10140

<211> 227

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<212> PRT
<213> Enterobacter cloacae
<400> 10140
Gln Ser Ser Asn Ile Asn Pro Val Tyr Leu Asn Phe Tyr Leu Leu Lys
                                    10
Asn Glu Gly Ser Gln His Lys Glu Ser Ala Met Lys Ile Val Ile Ile
                                25
Gly Ala Ser Gly Thr Val Gly Arg Ala Val Thr Glu Glu Leu Ser Arg
                            40
Arg His Glu Val Ile Ser Val Gly Arg Thr Gln Gly Asp His Gln Val
                        55
Asp Ile Thr Ser Gln Ala Ser Val Gln Ala Leu Phe Glu Lys Ile Gly
                    70
Pro Val Asp Ala Ile Val Ser Ala Ser Gly Gly Val His Phe Gly Pro
                85
Leu Ala Thr Met Thr Asp Gly Glu Phe Asn Arg Gly Leu Gln Asp Lys
                                105
Leu Leu Gly Gln Ile Arg Leu Ala Leu Thr Gly Gln His Tyr Leu Asn
        115
                            120
                                                125
Glu Gly Gly Ser Ile Thr Leu Ile Ser Gly Ile Val Ala His Glu Pro
                        135
                                            140
Ile Ala Gln Gly Val Asn Ala Thr Thr Val Asn Ala Ala Leu Glu Gly
                    150
                                        155
Phe Val Arg Ala Ala Cys Glu Leu Pro Arg Gly Ile Arg Ile Asn
                                    170
                                                         175
                165
Leu Ile Ser Pro Thr Val Leu Thr Glu Ser Val Glu Ala Tyr Asp Gly
                                                     190
            180
                                185
Phe Phe Pro Gly Phe Glu Ser Val Pro Ala Ala Thr Val Ala Gln Ala
                                                205
                            200
Tyr Arg Arg Ser Val Glu Gly Val Gln Ser Gly Arg Val Tyr Lys Val
   210
                        215
Gly Tyr
225
<210> 10141
<211> 176
<212> PRT
<213> Enterobacter cloacae
<400> 10141
Gly Asn Ile Met Ser Leu Pro Leu Ile Ser Pro Gln Gln Ala Asn Ala
Leu Ile Ala Glu Gly Ala Lys Leu Ile Asp Ile Arg Asp Pro Asp Glu
Tyr Ala Arq Glu His Ile Pro Ala Ala His Ser Ile Pro Leu Asp Ser
Leu Pro Gly Gly Leu Asn Ala Ala Pro Gly Glu Thr Val Ile Phe His
                        55
Cys Gln Ser Gly Ala Arg Thr Ser Asn Asn Ala Ala Arg Leu Ala Gln
                                        75
Ala Ala Ser Pro Ala Asn Ala Cys Val Val Glu Gly Gly Ile Gln Gly
                85
                                    90
Trp Lys Gln Ala Gly Leu Leu Thr Val Glu Asp Arg Ser Gln Pro Leu
                                105
                                                     110
Pro Leu Met Arg Gln Val Gln Ile Ala Ala Gly Leu Leu Ile Leu Cys
                            120
                                                125
Gly Val Val Leu Gly Tyr Ser Val Ser Ser Gly Phe Phe Leu Leu Ser
```

135

150

Gly Phe Val Gly Ala Gly Leu Leu Phe Ala Gly Val Thr Gly Phe Cys

140

```
Gly Met Ala Arg Leu Leu Lys Val Met Pro Trp Asn Arg Arg Thr
                                    170
<210> 10142
<211> 80
<212> PRT
<213> Enterobacter cloacae
<400> 10142
Met Ala Val Thr Leu Lys Leu Ala Thr Leu Arg Glu Val Ser Phe Ile
                                    10
Ile Phe Asn Trp Leu Ala Cys Thr Glu Leu Phe Met Gly Phe Trp Arg
                                25
Val Leu Phe Thr Ile Ile Leu Pro Pro Leu Gly Val Leu Leu Gly Lys
                            40
Gly Leu Gly Trp Ala Phe Ile Leu Asn Ile Leu Leu Thr Ile Leu Gly
Tyr Phe Pro Gly Leu Ile His Ala Phe Trp Val Gln Thr Lys Ser
<210> 10143
<211> 591
<212> PRT
<213> Enterobacter cloacae
<400> 10143
Phe His Gln Arg Gln Ala Thr Pro Asn Asp Arg Pro Asp Gln Pro His
                                    10
Gln Pro Pro Ala Thr Gly Gly Ala Arg Ser Ala Gly Gly Arg His Arg
            20
                                25
Asp Gly Leu Arg Ala Gly Leu Trp Arg Ala Arg Arg Ser Gly Gly Gly
Asp Asp Arg Gly Asp Gln Arg Gly Thr Gly Asp Arg Glu Arg Arg Gln
                        55
Pro Ser Ala Gly Asn Ser Arg Leu Arg Ala Arg His Arg Ser Gly Ser
                    70
Ala Val Ala Gly Ala Ala Val Pro Ala Ala Asp Arg Arg Arg His
                                    90
Leu Gly Gln Gln His Gln His Arg Ile Thr Gly Thr Arg Ile Cys
            100
                                105
                                                    110
Leu Gln Arg Gly Glu Ser Ile Met Thr Thr Leu Phe Asn Gln Pro Leu
                            120
Asn Val Ile Asn Val Gly Ile Ala Met Phe Ser Asp Asp Leu Lys Lys
                        135
                                            140
Gln His Val Pro Val Thr Gln Leu Asp Trp Thr Pro Pro Gly Gln Gly
                    150
                                        155
Asn Met Gln Val Val Lys Ala Leu Asp Gln Leu Ala Glu Lys Pro Leu
                                    170
Ala Glu Lys Ile Ala Ala Ala Asn Lys Ile Ala Leu Glu Arg Ile Ile
Gln Ser His Pro Val Leu Val Gly Tyr Asp Gln Ala Ile Asn Val Val
        195
                            200
Pro Gly Met Thr Arg Thr Thr Ile Leu His Ala Gly Pro Pro Val Thr
                        215
                                            220
Trp Glu Asn Met Cys Gly Ala Met Lys Gly Ala Val Thr Gly Ala Leu
                    230
                                        235
Val Phe Glu Gly Leu Ala Thr Asp Leu Glu Asp Ala Ala Arg Leu Ala
                245
                                    250
Ala Ser Gly Asp Ile Thr Phe Ser Pro Cys His Glu His Asp Cys Val
                                265
```

Gly Ser Met Ala Gly Val Thr Ser Ala Ser Met Phe Met His Ile Val

```
280
                                                 285
        275
Glu Asn Lys Thr Tyr Gly Asn Arg Ala Phe Thr Asn Leu Ser Glu Gln
                       295
                                            300
Met Ala Lys Ile Leu Arg Met Gly Ala Asn Asp Gln Ser Val Ile Asp
                    310
                                        315
Arg Leu Asn Trp Met Arg Asp Val Leu Gly Pro Met Leu Arg Asp Ala
                325
                                    330
Met Asn Ile Ile Gly Glu Ile Asp Leu Arg Leu Met Leu Ala Gln Ala
                                345
Leu His Met Gly Asp Glu Cys His Asn Arg Asn Asn Ala Gly Thr Thr
                            360
Leu Leu Ile Gln Ala Leu Thr Pro Gly Leu Ile Gln Ala Gly Tyr Ser
                        375
Val Thr Gln Gln Arg Glu Val Phe Glu Phe Val Ala Ser Ser Asp Tyr
                    390
                                        395
Phe Ser Gly Pro Thr Trp Met Ala Met Cys Lys Ala Ala Leu Asp Ala
                405
                                    410
Ala His Gly Ile Glu Tyr Ser Thr Val Val Thr Thr Met Ala Arg Asn
            420
                                425
Gly Tyr Glu Phe Gly Leu Arg Val Ser Gly Leu Pro Gly Gln Trp Phe
                            440
        435
Thr Gly Pro Ala Gln Gln Val Ile Gly Pro Met Phe Ala Gly Tyr Lys
    450
                        455
                                             460
Pro Glu Asp Ser Gly Leu Asp Ile Gly Asp Ser Ala Ile Thr Glu Thr
                    470
                                        475
Tyr Gly Ile Gly Gly Phe Ala Met Ala Thr Ala Pro Ala Ile Ala Ala
                                    490
                485
Leu Val Gly Gly Thr Val Glu Glu Ala Ile Asp Phe Ser Arg Gln Met
                                505
            500
                                                     510
Arg Glu Ile Thr Leu Gly Glu Asn Pro Asn Val Thr Ile Pro Leu Leu
        515
                            520
Ser Phe Met Gly Ile Pro Thr Ala Ile Asp Ile Thr Lys Val Ala Gly
                        535
                                             540
Ser Gly Ile Leu Pro Val Ile Asn Thr Ala Ile Ala His Lys Asp Ala
                    550
                                        555
Gly Ile Gly Met Ile Gly Ala Gly Ile Val His Pro Pro Phe Ser Cys
                565
                                    570
Phe Glu Lys Ala Leu Leu Thr Phe Arg Asp Arg Tyr Phe Leu
            580
                                585
```

<210> 10144

<211> 337

<212> PRT

<213> Enterobacter cloacae

## <400> 10144

Arg Ser Ala Val Met Ser Gln Thr Thr Glu Lys Lys Pro Arg Leu Thr Thr Ser Ala Met Ile Ala Ser Ile Ala Glu Glu Gly Gln Glu Thr Arg Ala Ala Pro Phe Gly His Ala Leu Val Lys Leu Ala Glu Gln Arg Pro 40 45 Glu Val Val Gly Met Thr Ala Asp Leu Ser Lys Tyr Thr Asp Leu His 55 60 Ile Phe Ala Gln Ala Tyr Pro Glu Arg Phe Phe Gln Met Gly Met Ala 75 Glu Gln Leu Leu Met Gly Ala Ala Gly Gly Met Ala Lys Glu Gly Phe 85 90 Ile Pro Phe Ala Thr Thr Tyr Ala Val Phe Ala Thr Arg Arg Ala Tyr 105 Asp Phe Ile His Gln Val Ile Ala Glu Glu His Leu Asn Val Lys Ile

```
115
                           120
                                                125
Cys Ala Ala Leu Pro Gly Leu Thr Thr Gly Tyr Gly Pro Ser His Gln
                       135
                                           140
Ala Thr Glu Asp Ile Ala Ile Met Arg Gly Ile Pro Gly Met Thr Ile
                                       155
                   150
Ile Asp Pro Cys Asp Ala Ile Asp Thr Glu Gln Ala Val Pro Ala Met
               165
                                   170
Ala Ala His Asp Gly Pro Val Tyr Met Arg Leu Leu Arg Gly Lys Val
                               185
Pro Val Val Leu Asp Gln Tyr Asn Tyr Gln Phe Lys Ile Gly Lys Ala
                            200
Ala Leu Leu Glu Glu Gly Asn Asp Val Leu Ile Val Ala Ser Gly Leu
                       215
                                            220
Met Thr Met Arg Ala Leu Glu Ala Ala Lys Gln Leu Arg Lys Asp Asn
                    230
                                        235
Val Ser Val Ala Val Leu His Ser Pro Thr Ile Lys Pro Leu Asp Glu
                245
                                    250
Glu Thr Ile Leu Ala Gln Ala Ala Lys Pro Gly Arg Leu Val Ile Val
                                265
           260
Ala Glu Asn His Ser Ser Val Gly Gly Leu Cys Glu Ala Val Ala Ser
                            280
                                                285
Leu Leu Met Arg Asn Arg Val Asn Val Asp Phe Asp Thr Val Ala Leu
                       295
                                            300
Pro Asp Ala Phe Leu Asp Ala Gly Ala Leu Pro Thr Leu His Asp Arg
                    310
                                        315
Tyr Gly Ile Ser Thr Thr Ala Met Val Glu Lys Ile Arg Arg Leu
                325
                                    330
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<210> 10145
<211> 84
```

<212> PRT

<213> Enterobacter cloacae

<400> 10145

 Phe Asn Val Arg Cys
 Glu Gly Val Leu Gly Gly Lys
 Gly Tyr Ala Thr 10

 1
 5
 10
 10
 15

 Ala Gly Gln Arg Glu Ala Glu His Lys
 Thr Gln Ile Val Ser Gly Tyr 30
 30

 Leu Trp Phe Asn Cys His Ile Glu Arg Asp Ala Cys Phe Leu Lys Leu 35
 40
 45

 Pro Ala Ile Gly Gly Asn Val Arg Gly Arg Ala Pro Ala Asp Thr Pro 50
 55
 60

 Met Ser Asp Gln Leu Thr Gly Met Arg Arg Cys Ala Val Cys Arg Gln 65
 70
 75
 80

 Ile Gly Arg
 10
 10
 15
 15
 15

<210> 10146

<211> 114

<212> PRT

<213> Enterobacter cloacae

<400> 10146

 Phe
 Ser
 Lys
 Ile
 Asp
 Phe
 Ile
 Asp
 Ser
 Ser
 Gly
 Leu
 Gly
 Ala
 Leu
 Val

 Ser
 Leu
 Leu
 Lys
 Met
 Met
 Asn
 Gly
 Lys
 Gly
 Glu
 Met
 Met
 Leu
 Cys
 Ala

 65
 70
 70
 70
 75
 75
 75
 80
 80

 Leu
 Asn
 Pro
 Ala
 Asn
 Met
 Phe
 Thr
 Leu
 Thr
 Arg
 Met
 Asp
 Arg

 Ile
 Phe
 Arg
 Ile
 Cys
 Pro
 Asp
 Arg
 Ala
 Thr
 Ala
 Leu
 Ser
 His
 Leu
 Asn

 100
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 100

Gln

<210> 10147 <211> 97 <212> PRT

<213> Enterobacter cloacae

<400> 10147

Arg Glu Val Pro Met Ser Gly Lys Arg Tyr Pro Glu Glu Phe Lys Ile 10 Glu Ala Val Lys Gln Val Val Asp Arg Gly His Ser Val Ser Ser Val 20 25 Ala Thr Arg Leu Asp Ile Thr Thr His Ser Leu Tyr Ala Trp Ile Lys 35 40 45 Lys Tyr Gly Pro Asp Ser Ser Thr His Asn Glu Gln Ser Asp Ala Gln 50 55 Ala Glu Ile Arg Arg Leu Gln Lys Glu Leu Lys Arg Val Thr Asp Glu 70 75 Arg Asp Ile Leu Lys Lys Ala Ala Ala Tyr Phe Ala Lys Leu Ser Asp 85 90

<210> 10148 <211> 137 <212> PRT <213> Enterobacter cloacae

<400> 10148

Lys Pro Phe Phe Thr Asp Ile Val Thr Phe Gln His Val Arg Gln Leu Leu Leu Arg Ile Val Arg Val Glu Val Gly Lys Glu Thr Glu Ile Ala Thr Val Asn Thr Asn Asn Leu Asn Ile Ile Ala Ser Gln Arg Ser Arg Arg Ala Gln His Ile Ala Val Ala Thr Asp His His Gly Glu Ile Arg Leu Leu Ala Asn Phe Arg Gln Arg Ala Gly Ser Asp Ala Phe Lys Leu 70 75 Gln Leu Leu Gly Asn Leu Leu Leu Asp His His Phe Ile Ala Phe Thr 85 Thr Gln Pro Ala Ile Gln His Phe Met Cys Arg Gln Cys Gly Arg Val 105 110 100 Thr Arg Met Ala Asp Asp Pro Asn Thr Pro Glu Met Ile Ile His Phe 120 Leu Glu Val Leu Val Pro Asp Glu

135

<210> 10149 <211> 208

<212> PRT

130

<213> Enterobacter cloacae

<400> 10149 Asn Ile Gly Ser Leu Asn Met Ser Ala Thr Ala Leu Val Thr Glu Phe 10 Leu Leu Ala Ala Glu Glu Gly Asn Ile Asp Ala Leu Lys Ala Cys Leu 20 25 Glu Lys Gly Val Asp Ile Asn Val Thr Asn Arg Gln Lys Arg Thr Ala 40 Ile Ile Ile Ala Ser Leu Lys Lys His Tyr Ala Cys Val Glu Phe Leu 55 Ile Ala Ala Gly Ala Asp Ile Asp Lys Gln Asp Gln Thr Cys Phe Asn 70 75 Pro Phe Leu Ile Ser Cys Leu Thr Asn Asp Leu Thr Leu Leu Arg Ile 90 Val Leu Pro Ala Asp Pro Asp Leu Asp Arg Leu Thr Arg Phe Gly Gly 105 Val Gly Ile Thr Pro Ala Ser Glu Lys Gly His Val Glu Ile Val Arg 120 125 Glu Leu Leu Glu Lys Thr Asp Ile Asn Val Asn His Thr Asn Phe Val 135 140 Gly Trp Thr Pro Leu Leu Glu Ala Ile Val Leu Asn Asp Gly Gly Ala 150 155 Lys Gln Gln Glu Ile Val Lys Leu Leu Asp His Gly Ala Asn Pro 170 165 His Met Thr Asp Lys Tyr Gly Lys Thr Pro Leu Glu Leu Ala Arg Glu 180 185 Lys Gly Phe Asn Ala Ile Ala Asp Leu Leu Leu Ala Ala Gly Ala 200 <210> 10150 <211> 550 <212> PRT <213> Enterobacter cloacae <400> 10150 Arg Ile Arg Ser Ala Phe Pro Trp Leu Ala Val Thr Glu Lys Thr His 10 Cys Tyr Arg Arg Ala Phe Ser Thr Thr Ala Ala Pro Phe Tyr Leu Lys 25 Gln Val Lys Ile Met Pro Thr Lys Ile Val Ile Lys Lys Asn Thr Tyr 35 40 Phe Asp Ser Val Ser Leu Met Ser Val Ser Thr Lys Ala Asn Lys Leu 55 60 Pro Gly Val Glu Gln Ala Phe Val Ala Met Ala Thr Glu Met Asn Lys 70 75 80 Gly Val Leu Lys Asn Leu Gly Leu Leu Thr Pro Glu Leu Ala Asp Ala Lys Asn Gly Asp Leu Met Ile Val Ile Lys Gly Asp Ala Ala Asn Asp 100 105 Glu Thr Leu Ala Ala Ile Glu Ala Leu Phe Thr Arg Lys Glu Arg Thr 120 Gly Ser His Glu Ala Arg Tyr Ala Ser Ile Ala Ser Ala Lys Thr His 135 140 Arg Pro Asp Ser Asn Leu Ala Val Ile Ser Val Asn Gly Thr Phe Ala 150 155 Ala Arg Glu Ala Arg Gln Ala Leu Glu Asn Asp Leu Asn Val Met Leu 165 170 Phe Ser Asp Asn Val Ser Leu Asp Asp Glu Leu Ala Leu Lys Gln Leu 185 190 Ala His Glu Lys Gly Leu Leu Met Met Gly Pro Asp Cys Gly Thr Ala

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Ile Ile Asn Gly Ala Gly Leu Cys Phe Ala Asn Ala Val Arg Arg Gly
                        215
                                            220
Pro Ile Gly Ile Val Gly Ala Ser Gly Thr Gly Ser Gln Glu Leu Ser
                    230
                                        235
Val Arg Ile His Glu Phe Gly Gly Gly Val Ser Gln Leu Ile Gly Thr
                245
                                    250
Gly Gly Arg Asp Leu Ser Glu Lys Ile Gly Gly Leu Met Met Leu Asp
            260
                                265
Ala Ile Asp Met Leu Glu Ala Asp Asp Ala Thr Arg Val Ile Ala Leu
                            280
                                                 285
Ile Ser Lys Pro Pro Ala Pro Ala Val Ala Glu Lys Val Leu Ala Arg
                        295
                                             300
Ala Arg Ala Cys Arg Lys Pro Val Val Val Cys Phe Leu Gly Arg Asn
                    310
                                         315
Glu Pro Pro Ala Asp Glu Asp Gly Leu Gln Phe Ala Arg Gly Thr Lys
                325
                                    330
Glu Ala Ala Leu Lys Ala Val Leu Leu Thr Gly Ile Lys Lys Asp Asp
                                345
Leu Asp Leu His Pro Leu Asn Trp Pro Leu Ile Glu Glu Val Arg Thr
                            360
        355
                                                 365
Arg Leu Thr Ser Gln Gln Lys Tyr Ile Arg Gly Leu Phe Cys Gly Gly
                        375
                                             380
    370
Thr Leu Cys Asp Glu Ala Met Phe Ala Ala Leu Glu Lys Phe Asp Asp
                    390
                                        395
Val Tyr Ser Asn Ile Gln Pro Asp Pro Ala Arg Arg Leu Lys Asp Ile
                405
                                    410
Ser Val Ser Gln Ala His Thr Phe Leu Asp Phe Gly Asp Asp Asp Phe
                                425
                                                     430
            420
Thr Asn Gly Lys Pro His Pro Met Ile Asp Pro Thr Asn Arg Ile Ser
                            440
        435
                                                 445
Arg Leu Leu Gln Glu Ala Arg Asp Pro Gln Val Gly Val Ile Val Met
                        455
                                             460
Asp Phe Val Leu Gly Phe Gly Ala His Asp Asp Pro Val Gly Val Met
                    470
                                         475
Ile Glu Ala Ile Lys Glu Ala Gln Ala Ile Ala Asn Ala Asp Asn Arg
                485
                                    490
Pro Leu Glu Ile Leu Gly Tyr Val Leu Gly Thr Asp Gln Asp Pro Gln
                                505
                                                     510
            500
Ser Leu Ala Gln Gln Cys Gln Leu Leu Thr Asp Ala Gly Val Ile Trp
        515
                            520
                                                 525
Ala Ser Ser Ser Thr Asn Thr Gly Leu Leu Ala Arg Glu Phe Val Cys
                        535
                                             540
Lys Gly Glu Lys Ala
                    550
<210> 10151
<211> 330
<212> PRT
<213> Enterobacter cloacae
<400> 10151
Gly His Gln Asn Ala Pro Ser Lys Gly Asn Lys Met Lys Glu Leu Met
Val Val Ala Ile Gly Gly Asn Ser Ile Ile Lys Asp Asn Ala Ser Gln
Ser Ile Glu His Gln Ala Gln Ala Val Lys Ala Val Ala Glu Ser Val
                            40
                                                 45
Leu Glu Met Leu Ala Ser Asp Tyr Asp Ile Val Leu Thr His Gly Asn
                        55
                                             60
Gly Pro Gln Val Gly Leu Asp Leu Arg Arg Ala Glu Ile Ala His Glu
```

```
Arg Glu Gly Leu Pro Leu Thr Pro Leu Ala Asn Cys Val Ala Asp Thr
                85
                                    90
Gln Gly Gly Ile Gly Tyr Leu Ile Gln Gln Ala Leu Asn Asn Arg Leu
            100
                                105
Ala Ala Arg Gly Glu Gln Lys Ala Val Thr Val Val Thr Gln Val Glu
       115
                            120
Val Asp Lys Asn Asp Pro Gly Phe Thr His Pro Thr Lys Pro Ile Gly
                        135
Ala Phe Phe Ser Glu Ala Gln Arg Asp Glu Leu Gln Leu Ala His Pro
                    150
                                        155
Asp Trp His Phe Val Glu Asp Ser Gly Arg Gly Tyr Arg Arg Val Val
                165
                                    170
Ala Ser Pro Gln Pro Leu Arg Ile Val Glu Ala Asp Ala Ile Lys Ala
            180
                                185
Leu Thr Gln Lys Gly Phe Val Val Ile Gly Ala Gly Gly Gly Ile
                            200
                                                 205
        195
Pro Val Val Arg Ser Glu Gln Gly Asp Tyr Gln Ser Val Asp Ala Val
                        215
                                            220
Ile Asp Lys Asp Leu Ser Thr Ala Leu Leu Ala Arg Glu Ile Arg Ala
                    230
                                        235
Asp Val Leu Val Ile Thr Thr Gly Val Glu Lys Val Cys Val Asn Phe
                245
                                    250
Gly Lys Pro Asn Gln Gln Ala Leu Asp Ile Val Asn Val Ala Gln Met'
            260
                                265
                                                     270
Thr Arg Tyr Met Asp Glu Gly His Phe Pro Ala Gly Ser Met Leu Pro
        275
                            280
Lys Ile Val Ala Ser Leu Glu Phe Leu Arg His Gly Gly Arg Arg Val
                        295
                                            300
Ile Ile Thr Ser Pro Asp Cys Leu Pro Ala Ala Leu Arg Gly Glu Thr
                    310
                                        315
Gly Thr His Ile Ile Asn Glu Gly Arg
                325
<210> 10152
<211> 445
<212> PRT
<213> Enterobacter cloacae
<400> 10152
Val Met Ser Arg Ile Glu Gln Ala Val Pro Tyr Ile Lys Ala Lys Lys
                                    10
Thr Asn Tyr Arg Phe Val Val Leu Ala Leu Ile Phe Ile Val Tyr Ala
Ile Asn Tyr Ala Asp Arg Thr Asn Ile Gly Ala Val Leu Pro Phe Ile
Ile Asp Glu Phe His Ile Asn Asn Phe Glu Ala Gly Ala Ile Ala Ser
Met Phe Phe Leu Gly Tyr Ala Leu Ser Gln Ile Pro Ala Gly Phe Phe
                    70
Ile Ala Lys Lys Gly Ile Arg Gly Met Val Ala Leu Ser Ile Phe Gly
                85
                                    90
Phe Ser Ala Phe Thr Trp Leu Met Gly Thr Ala Thr Ser Val Leu Gly
                                105
                                                    110
Leu Lys Cys Ile Arg Leu Gly Leu Gly Leu Thr Glu Gly Pro Cys Pro
                            120
        115
                                                125
Val Gly Leu Ala Ser Thr Ile Asn Asn Trp Phe Pro Pro Lys Glu Lys
                        135
                                            140
Ala Thr Ala Thr Gly Val Tyr Ile Ala Ala Thr Met Phe Ala Pro Ile
                    150
                                        155
Leu Val Pro Pro Leu Ala Val Trp Ile Ala Met Thr Trp Gly Trp Arg
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170

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Trp Val Phe Phe Ser Phe Ala Ile Pro Gly Leu Val Ile Ala Val Leu
            180
                                185
Trp Tyr Leu Leu Val Arg Thr Arg Pro Ser Glu Ser Ala Phe Val Ser
                            200
       195
                                                205
Lys Ala Glu Leu Glu Thr Ile Thr Ala Gly Gln Glu Thr Pro Asp Ala
                        215
                                            220
Arg Arg Glu Asn Ile Val Ile Ser Pro Gly Phe Ala Arg Leu Asp Arg
                    230
                                        235
Leu Ile Arg Val Arg Glu Leu Ala Pro Val Ser Thr Val Lys Gly Leu
                245
                                    250
Phe Thr Ser Lys Asn Ile Leu Gly Asp Cys Leu Ala Tyr Phe Met Met
                                265
Val Ser Val Leu Tyr Gly Leu Leu Thr Trp Ile Pro Leu Tyr Leu Val
                            280
Lys Glu Lys Gly Phe Thr Phe Met Ser Met Gly Leu Val Ala Ser Met
                        295
                                            300
Pro Cys Ile Gly Gly Phe Ile Gly Ala Ile Phe. Gly Gly Tyr Val Ser
                    310
                                        315
Asp Lys Leu Gly Arg Arg Lys Pro Thr Met Met Phe Thr Ala
                                    330
                325
Ile Ser Thr Val Leu Met Met Val Ile Met Leu Asn Ile Pro Gln Ser
            340
                                345
                                                    350
Thr Val Ala Val Cys Val Gly Leu Phe Phe Val Gly Leu Cys Leu Asn
                            360
                                                365
Ile Gly Trp Pro Ala Phe Thr Ala Tyr Gly Met Ala Val Ala Asp Ser
    370
                        375
                                            380
Lys Thr Tyr Pro Ile Ala Ala Ser Ile Ile Asn Ser Gly Gly Asn Leu
                    390
                                        395
Gly Gly Phe Val Ser Pro Met Leu Ala Gly Tyr Leu Leu Asp Lys Thr
                405
                                    410
                                                         415
Gly Ser Phe Asn Ser Val Phe Ile Tyr Phe Gly Ile Cys Ala Ala Ile
            420
                                425
Gly Leu Ile Met Ile Met Leu Leu Glu Glu Pro Lys
       435
                            440
                                                445
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<210> 10153 <211> 254
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<400> 10153

Trp Ser Lys Cys Met Leu Leu Lys Asn Lys Val Ala Val Ile Thr Gly 10 Ala Ala Ser Val Arg Gly Leu Gly Phe Ala Thr Ala Lys Leu Tyr Ala 25 Glu Gln Gly Ala Lys Val Val Ile Ile Asp Leu Asn Ala Glu Ala Ser Arg Ala Ala Ala Ser Leu Gly Asp Glu His Leu Gly Leu Ala Ala 55 Asn Val Ser Asn Glu Leu Gln Val Asn Ala Ala Ile Glu Gln Val Leu 70 75 Gly Lys Tyr Gly Arg Ile Asp Ile Leu Val Asn Asn Ala Gly Ile Thr 90 85 Gln Pro Ile Lys Leu Met Asp Ile Lys Arg Glu Asn Tyr Asp Ala Val 100 105 110 Leu Asp Val Ser Leu Arg Gly Thr Leu Leu Met Ser Gln Ala Val Ile 115 120 125 Pro Thr Met Arg Ala Ģln Lys Ser Gly Ser Ile Val Cys Ile Ser Ser 135 140 Val Ser Ala Gln Arg Gly Gly Gly Ile Phe Gly Gly Pro His Tyr Ser 150 155

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

5641 Ala Ala Lys Ala Gly Val Leu Gly Leu Ala Lys Ala Met Ala Arg Glu 165 170

Leu Gly Pro Asp Asn Val Arg Val Asn Cys Ile Thr Pro Gly Leu Ile 180 185

Gln Thr Asp Ile Thr Ala Gly Lys Leu Ser Asp Glu Met Lys Thr Ser 200 205

Ile Leu Ala Gly Ile Pro Leu Asn Arg Leu Gly Asp Ala Gln Asp Ile 215 220

Ala Arg Ala Ala Leu Phe Leu Gly Ser Asp Leu Ser Ser Tyr Ser Thr 230 235

Gly Ile Thr Leu Asp Val Asn Gly Gly Met Leu Ile His 245

<210> 10154

<211> 286

<212> PRT

<213> Enterobacter cloacae

<400> 10154

Gly Asp Thr Thr Met Thr Asp Thr Thr Val Gln Gln Val Ala Ala Ala

Ala Trp Arg Ile Arg Arg Tyr Ala Leu Arg Met Gly Glu Val Gln Gly 20

Gln Gly Tyr Ile Gly Gln Ala Leu Gly Tyr Ala Asp Val Leu Ala Thr 35 40

Ala Phe Thr His Gly Met Asn Leu Lys Pro Gly Glu Pro Glu Trp Glu 55

Gly Arg Asp Arg Phe Leu Leu Ser His Gly His Tyr Ala Ile Ala Cys 70 75

Tyr Ala Ala Leu Ile Glu Ala Gly Ile Val Pro Glu Glu Glu Leu Glu 90 85

Thr Tyr Gly Ala Asp Asp Ser Arg Leu Pro Met Ser Gly Met Ala Thr 100 105

Tyr Thr Pro Gly Met Glu Ile Ser Gly Gly Ser Leu Gly Gln Gly Leu 120 115

Ser Ile Gly Val Gly Met Ala Leu Gly Leu Lys Arg Lys Gln Ser Ala 135 140

Ala Trp Val Val Asn Ser Met Ser Asp Gly Glu Leu Asp Glu Gly Ser 150 155

Thr Trp Glu Ala Ala Met Ser Ala Ala His His Gly Leu Ser Asn Leu 170 165

Ile Val Leu Val Asp Ile Asn Arg Gln Gln Ala Asp Gly Asn Ser His 180 185 190

Ala Ile Leu Gly Phe Glu Pro Leu Glu Asp Lys Trp Thr Ser Phe Gly . 200 205

Trp Tyr Val Gln Arg Val Asn Gly Asn Asp Val Pro Ser Leu Val Thr 215 220

Ala Phe Asp Asn Ala Lys Arg Tyr Pro Glu Asn Gln Pro Arg Val Ile 230 235

Leu Cys Asp Thr Leu Met Gly Lys Gly Val Pro Phe Leu Glu Lys Arg 245 250

Asp Lys Asn His Phe Ile Arg Val Asp Ala Asp Glu Trp Gln Lys Ala 265

Leu Ala Val Leu Asp Ala Asn Lys Pro Glu Gly Val Leu 280

<210> 10155

<211> 395

<212> PRT

<213> Enterobacter cloacae

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<400> 10155
Arg Met Ser Ala Asn Lys Leu Ala Ser Ser Ala Gln Gly Leu Gln Ser
                                    10
Ser Ala Ile Arg Glu Leu Leu Lys His Ser Lys Met Ala Gly Val Ile
            20
                                25
Ser Leu Gly Gly Gly Ile Pro Asn Pro Asp Leu Phe Asp His Glu Gly
                            40
                                                45
Leu Lys Ile Ala Ala Asp Ala Val Leu Ser Gln His Phe Gly Glu Ala
                        55
                                            60
Phe Gln Tyr Gly Leu Thr Glu Gly Val Pro Gly Leu Arg Glu Glu Ile
                    70
                                        75
Gln Arg Ile Cys Glu Gly Arg Gly Ile Ala Cys Lys Ala Asp Asp Val
                85
                                    90
Val Ile Thr Ser Gly Ser Gln Gln Ser Leu Asp Val Leu Ala Arg Ala
                                105
Leu Ile Asn Pro Gly Asp Thr Val Val Val Glu Arg Pro Thr Tyr Leu
                            120
Ala Ala Leu Gln Val Phe Gly Leu Ala Gln Ala Lys Phe Glu Ser Val
                        135
                                            140
Gly Thr Asp Gly Asp Gly Met Lys Val Asp Glu Leu Glu Ala Leu Val
                    150
                                        155
Ala Thr Lys Thr Ile Lys Ala Val Tyr Ile Val Pro Thr Phe Gly Asn
                165
                                    170
Pro Gly Gly Val Thr Leu Ser Glu Ala Arg Arg Lys Gln Leu Val Glu
            180
                                185
Leu Ser Lys Arg Tyr Asp Phe Val Ile Ile Glu Asp Asp Pro Tyr Ser
                            200
                                                 205
Glu Ile Asn Tyr Thr Asp Glu Ala Phe Arg Pro Leu Ile Ala His Ala
                        215
                                            220
Lys Asp Ile Gly Asn Glu Asp Asn Val Val Tyr Thr Ser Thr Phe Ser
                    230
                                        235
Lys Ile Leu Ala Pro Gly Thr Arg Val Gly Trp Val Leu Val Pro Glu
                                    250
                245
Trp Leu Lys Arg Ala Val Val Asn Leu Lys Gln Thr Thr Asp Leu His
            260
                                265
                                                     270
Thr Ser Thr Leu Ser Gln Leu Met Thr Tyr Glu Tyr Leu Lys Thr Gly
                            280
Arg Leu Ala Asn Gln Ile Lys Met Ile Arg Glu Ala Tyr Arg Gln Lys
                        295
                                            300
Tyr Gln Thr Phe Ala Thr Glu Leu Glu Ala Glu Leu Gly Asp Val Met
                    310
                                         315
Ser Phe His Lys Pro Lys Gly Gly Met Phe Leu Trp Ala Lys Met Asn
                325
                                    330
Asn Gly Ile Asn Thr Thr Lys Trp Leu Glu Lys Thr Leu Ser Asn Gly
                                345
            340
                                                     350
Val Val Phe Val Pro Gly Glu Phe Phe Tyr Cys Asn Glu Pro Asp His
                            360
Thr Thr Leu Arg Met Ser Phe Val Thr Pro Thr Asp Glu Gln Leu Lys
                        375
                                            380
Glu Ala Val Arg Arg Leu Arg Ile Ser Leu
                    390
                                         395
<210> 10156
<211> 145
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<212> PRT

<213> Enterobacter cloacae

<400> 10156

Ile Ser Glu Leu Thr Val Ala Asn Asp Val Thr Phe Pro Ala Thr Leu 1 5 10 15 Thr Ser Val Ser Pro Leu Ala Ala Trp Leu Glu Arg Gln Met Ala Ser

20 25 Leu Ser Val Ser Asp Asp Trp Arg Phe Ala Leu Asp Leu Ala Ala Cys 40 Glu Thr Ala Thr Asn Ile Ile Arg His Ala Leu His Glu Asp Pro Glu 55 60 Arg Cys Phe Thr Val Glu Phe Ile Val Thr Val Ser Asp Ala Ala Leu 70 75 Arg Phe Thr Asp Asp Gly Asp Lys Phe Pro Ala Glu Arg Leu Ala Ala 85 90 Val Arg Asp Asp Ala Thr Phe Asp Ala Ser Leu Leu Ala Glu Ser Gly 105 Arg Gly Leu Lys Leu Ile Phe Leu Tyr Val Asp Asn Phe Thr Val Glu 120 Asn Val Ala Gly Lys Asn Ile Thr Val Leu Glu Lys Arg Met Val Gly

145

<210> 10157 <211> 400 <212> PRT

<400> 10157

<213> Enterobacter cloacae

Phe Pro Leu Thr Tyr Gly Cys Gly Phe Leu Leu Ser Glu Asn Arg Ala Gly Val Tyr Met Ser Ser Thr Glu Ala Thr Asn Lys Ala Pro Ala Val 25 Pro Glu Lys Ser Ser Val Lys Ser Leu Lys Glu Glu Pro Val Leu Gln Val Glu Arg Arg Asp Phe Val Asp Leu Val Pro Glu Lys Arg Pro Arg 55 Val Gln Ser Leu Arg Gly Phe Asp Asp Cys Tyr Thr Asp Ile Val Asp 70 75 Tyr Ile Val Arg Cys Thr His Lys Ile Trp Asp Glu Arg Asp Val Gly 85 90 Leu Ile Tyr Ser His Tyr Thr His Asn Cys Val Leu Tyr Asn Ala Leu 100 105 Gly Thr Leu Tyr Asn Arg Glu Gln Val Val Gln Asp Thr Leu Gln Arg 120 Leu Ile Ala Phe Pro Glu Arg Arg Gly Met Ala Thr Gln Val Ile Trp 135 140 Asn Gly Asn Asp Val Asp Gly Phe Tyr Thr Ser His Leu Val Thr Gly 150 Ser Gly Arg His Thr Gln His Ser His Leu Gly Lys Pro Thr Asn Arg 170 Thr Phe Val Thr Arg Thr Val Ala Asp Cys Met Ile His Glu Asn Lys 185 Ile Tyr Arg Glu Trp Val Val Ser Asp Asn Met Ser Leu Met Lys Gln 200 195 Leu Gly Leu Asn Thr Asp Gln Ile Ala Phe Asn Met Ala Lys Glu Gln 215 220 Phe Asp Lys Gly Phe Arg Val Met Asp Ile Gly Glu Asn Gly Arg Met 230 . 235 Leu Gly Gln Tyr Pro Pro Glu Met Glu Cys Asp Val Ser Ile Ala His 250 245 Thr Asp Thr Glu Glu Gln Cys Leu Arg Trp Leu His Glu Ile Tyr Asn 265 Arg Arg Met Phe Gly Lys Ile Lys Glu Val Tyr Ala Pro Asn Val Gln 280 Trp His Gly Pro Leu Met Lys Glu Leu Tyr Gly Thr Ala Ala Val Thr

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295
His Gln Thr Leu Ala Leu Val Gly Met Ile Pro Asp Gly Ala Trp Leu
                                       315
                    310
Pro Gln His Ile Cys Ser Asn Pro Cys Asp Glu Gly Gly Val Lys Val
                                    330
                325
Ala Val Arg Trp Ile Ile Glu Gly His His Leu Gly Tyr Gly Glu Leu
                               345
            340
Gly Lys Pro Thr Gly Glu Arg Leu Phe Val Met Gly Met Ser His Tyr
                            360
His Ile Val Asn Gly Lys Ile Val Asp Glu Trp Val Val Tyr Asp His
                        375
                                            380
Leu Ala Leu Leu Ala Gln Ile Lys Leu Gly Gln Met Glu Asp Ala
                    390
                                        395
<210> 10158
<211> 432
<212> PRT
<213> Enterobacter cloacae
<400> 10158
Met Leu Asn Gln Val Ser Trp Ile Lys Arg Pro Gln Gly Gln Asp Ala
                                    10
Gln Ala Asp Arg Ser Leu Thr Glu Lys Val Ser Ala Ile Ile Glu Arg
                                25
            20
Val Lys Thr Glu Gly Asp Thr Ala Leu Arg Ala Phe Ser Gln Gln Phe
                            40
Asp Lys Val Val Pro Ala Gln Phe Glu Val Ser Glu Gln Glu Ile Ala
                        55
Glu Ala Leu Glu Gly Met Asp Ala Gln Thr Arg Arg Asp Ser Glu Phe
                                        75
Ala Ile Asn Gln Val Cys Arg Phe Ala Gln Ala Gln Leu Ala Thr Met
                85
                                    90
Gln Pro Leu Glu Val Glu Thr Leu Pro Gly Val His Leu Gly His Arg
            100
                                105
Ile Ile Pro Val Gln Thr Val Gly Cys Tyr Val Pro Gly Gly Arg Tyr
        115
                            120
                                                125
Pro Ile Leu Ser Ala Pro Val Met Ser Ile Val Pro Ala Thr Val Ala
                        135
                                            140
Gly Cys Glu Gln Ile Ile Ala Cys Leu Pro Pro Gly Ala His Pro Ala
                    150
                                        155
Met Ile Ala Val Cys His Leu Ala Gly Ala His Arg Ile Phe Lys Val
                                    170
Gly Gly Ala Gln Ala Ile Ala Ala Met Ala Trp Gly Thr Glu Ser Ile
                                185
Pro Ser Val Asp Lys Ile Val Gly Pro Gly Asn Ala Phe Val Asn Glu
                            200
Ala Lys Arg Gln Val Phe Gly Arg Val Gly Ile Asp Ala Leu Ala Gly
                        215
                                            220
Pro Ser Glu Ile Phe Thr Ile Ala Asp Asp Ser Ala Asp Pro Arg Ile
                    230
                                        235
Leu Ala Ala Asp Met Leu Ala Gln Ala Glu His Asp Ile His Thr Arg
                245
                                    250
Val Gly Leu Ala Thr Thr Ser Arg Asp Ile Ala Glu Arg Thr Leu Ala
                                265
Glu Val Glu Arg Gln Leu Ala Ser Leu Pro Thr Ala Ala Thr Ala Gly
                            280
                                                285
Glu Ala Trp Arg Arg Gln Gly Glu Ile Val Leu Cys Glu Asp Glu Ala
                        295
                                            300
Gln Leu Ile Ala Phe Ala Asp His Met Ala Thr Glu His Leu Gln Val
                   310
                                       315
His Thr Arg Asp Pro His Ala Thr Ala Ala Lys Ile Arg Asn Tyr Gly
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325 330 Ser Leu Phe Ile Gly Gln Asn Ala Ser Val Val Phe Ser Asp Lys Cys 340 345 Cys Gly Thr Asn His Thr Leu Pro Thr Met Ala Ala Ala Arg Tyr Thr 360 365 Gly Gly Leu Trp Val Gly Ala Tyr Val Lys Ile Cys Thr His Gln Trp 375 380 Ile Asp Glu Gln Gly Ile Pro Ala Ile Ala Glu Pro Ala Ile Arg Gln 390 395 Ser Arg Thr Glu Gly Met Gln Gly His Arg Arg Ala Ala Glu Ile Arg 405 410 Leu Arg Pro Gln Asp Ile Asp Ala Ile Thr Thr Gly Met Arg Asp 425 <210> 10159

<211> 455

<212> PRT

<213> Enterobacter cloacae

<400> 10159 Asn Val Ser Arg Ala Ala Phe Cys Pro Val Phe Ile Thr Arg Glu Pro 10 Glu Thr Met Lys Arg Leu Ile Pro Pro Asp Asp Cys Pro Glu Glu Ile 20 25 Ala His Arg Leu Asp Val Ile Gln Gln His Arg Ala Leu Asn Ala Ile 35 40 Leu Gly Val Asn Pro Asp Ala Met Ser Gln Ala Glu Gln His Gln Gln 55 Gln Arg Arg Gly Glu Pro Ile Gly Pro Leu His Gly Val Pro Leu 70 75 Ile Val Lys Asp Asn Ile Ala Cys Ala Pro Met Pro Ile Thr Leu Gly 8.5 90 Cys Arg Ala Leu Ala Ser Leu Asn Ala Thr Ala Asp Ala Arg Val Val 100 105 110 Gln Arg Leu Arg Ser Ala Gly Ala Ile Ile Leu Ala Arg Ala Asn Met 120 125 Ser Glu Phe Ala Phe Asp Val Arg Ser Arg Ser Ser Leu Gly Gly Asp 135 140 Val Ala Asn Pro Leu Cys Pro Thr Leu Thr Ala Gly Gly Ser Ser Gly 150 155 Gly Cys Ala Ala Ala Val Ala Ala Gly Met Ala Asp Gly Ala Leu Gly 165 170 Thr Asp Thr Gly Gly Ser Ile Arg Ile Pro Cys Ser Tyr Thr Gly Leu 180 185 Met Gly Leu Arg Pro Ala Phe Arg Arg Ser Gln Leu Asp Gly Val Ala 200 Pro Leu Ser Pro Ser Lys Asp Thr Val Gly Pro Met Val His Ser Val 215 Glu Asp Ala Ala Leu Leu His Ala Val Ile His Gly Leu Pro Pro Val 230 Ala Leu Pro Val Arg Ser Leu Lys Gly Val Arg Phe Gly Val Val Thr 245 250 Ala Leu Gln Gly Glu Asp Glu Val Gln Leu Glu Val Trp Gln Ser Ala 260 265 Leu His Thr Leu Arg Arg Ala Gly Ala Thr Leu Val Glu Val Ser Leu 280 Pro Phe Leu Glu Val Arg Gln Ala Thr Cys Leu Ser Leu Tyr Glu 295 300 Phe Arg Val Ala Ile Asp Asp Trp Leu Ser Lys Gln Pro Gly Ala Pro 310 315 Ser Gly Leu Thr Ser Ile Val Asp Ser Gly Ala Phe Leu Pro Glu Phe

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325
                                    330
Ala Pro Phe Leu Arg Gln Met Leu Ala Ser Asn Thr Leu Lys Thr Pro
            340
                                345
                                                    350
Leu Trp Leu Ala Gly Arg Arg Phe Gln Arg Leu Leu Arg Gln Asn Leu
                            360
                                                365
Cys Gln Val Ala Glu Ala Gln Arg Ile Asp Gly Phe Val Tyr Pro Thr
                        375
                                            380
Val Gln Arg Leu Pro Glu Ser Met Ala Lys Met Pro Pro Gly Cys Ala
                    390
                                        395
Pro Glu Leu Ala Ala Ile Ser Gly Leu Pro Ala Ile Thr Leu Pro Cys
                                    410
Gly Val Ser Arg Ile Gly Leu Pro Val Gly Met Glu Met Leu Ser Val
                                425
Gln Glu Asp Glu Ala Ala Leu Met Val Leu Ala Leu Ala Cys Glu Gly
                            440
Ala Leu Gly Glu Lys Gly
    450
                        455
<210> 10160
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 10160
Met Leu Leu Phe Val Cys Cys Val Thr Met Glu Asn Ala Met Pro Gln
                                    10
Ile Ser Arg Thr Ala Leu Val Pro Tyr Ser Ala Glu Gln Met Tyr Gln
                                25
Leu Val Asn Asp Val Gln Ser Tyr Pro Glu Phe Ile Pro Gly Cys Thr
                            40
Gly Ser Arg Val Leu Glu Ser Gly Pro Thr Gln Met Thr Ala Ala Val
                        55
Asp Val Ser Lys Ala Gly Ile Ser Lys Thr Phe Thr Thr Arg Asn Thr
                    70
                                        75
Leu Thr Ser Asn Gln Ser Ile Leu Met His Leu Val Asp Gly Pro Phe
                85
                                    90
Lys Lys Leu Met Gly Gly Trp Lys Phe Thr Pro Leu Ser Ala Asp Ala
            100
                                105
                                                     110
Cys Arg Ile Glu Phe His Leu Asp Phe Glu Phe Thr Asn Lys Leu Ile
                            120
Glu Leu Ala Phe Gly Arg Ile Phe Lys Glu Leu Ala Ser Asn Met Val
                        135
Gln Ala Phe Thr Thr Arg Ala Lys Glu Val Tyr Ser Val Ala
                    150
<210> 10161
<211> 127
<212> PRT
<213> Enterobacter cloacae
<400> 10161
Asp Pro Ser Gly Arg Leu Ala Lys Gly Ile Ile Pro Trp Asp Val Leu
                                    10
Gly Arg Ser Gly Trp Glu Lys Phe Arg Gly Cys Ser Val Lys Lys Asn
                                25
Ala Ala Ser Gln Ala Glu Leu Glu Arg Gln Arg Ala Glu Gln Gln Asp
                            40
Lys Ile Asn Ala Leu Leu Glu Leu Met Lys Ala Asp Gly Ile Ser Pro
                        55
Ser Asp Leu Leu Gly Ser Asp Leu Ala Gln Ala Gly Gln Pro Thr Lys
```

Lys Arg Lys Ala Arg Ala Ala Lys Tyr Arg Phe Ile Asp Ala Asn Gly 85 90 Glu Glu Lys Thr Trp Thr Gly Gln Gly Arg Thr Pro Lys Pro Ile Ala 100 105 Thr Ala Leu Ala Asn Gly Lys Ser Leu Asp Asp Phe Leu Ile 120 <210> 10162 <211> 544 <212> PRT <213> Enterobacter cloacae <400> 10162 Lys Gly Ala Val Asp Leu Pro Arg Ser Leu Leu Phe Ile Arg His Ala 10 Ser Met Lys Asn Met Lys Leu Glu Trp Lys Arg Gly Asp Trp Ala Ala 25 Tyr Phe Gly Leu Met Thr Asn Asn Leu Thr Asn Leu Leu Thr Met Met Gly Leu Leu Ile Phe Val Val Gly Ile Pro Lys Glu Ile Val Tyr Gly Arg Ile Ala Pro Ala Phe Gly Leu Ala Val Leu Val Ala Ser Leu Cys 70 75 Tyr Thr Trp Phe Gly Leu Gln Met Ala Arg Ala Thr Gly Arg Thr Asp 85 90 Val Thr Ala Leu Pro Ser Gly Pro Ser Ala Pro Ser Ile Phe Thr Val 100 105 Thr Phe Leu Val Leu Met Pro Val Tyr Gln Gln Thr Gly Asp Ala Asp 120 125 Phe Ala Ile Gln Ile Gly Leu Val Trp Cys Phe Val Glu Ala Met Ile 135 140 Leu Ala Gly Gly Ser Phe Leu Gly Glu Thr Ile Arg Lys Met Ile Pro 150 155 Arg Thr Val Leu Leu Ser Cys Leu Ser Gly Leu Gly Leu Leu Leu 170 165 Ala Met Asn Pro Met Leu Gln Ala Phe Glu Ala Pro Thr Val Ser Phe 180 185 190 Ile Val Leu Leu Ile Phe Ile Asn Trp Phe Gly Lys Lys Pro Ile 200 195 205 Phe Ala Arg Ile Pro Thr Gly Leu Leu Leu Ile Ala Gly Thr Leu 215 220 Leu Ala Trp Ile Ser Gly Leu Gln Ser Pro Asp Ala Ile Lys Ala Ser 230 235 Met Ser Ser Phe Gly Phe Asn Pro Pro Glu Val His Val Asp Ser Phe 245 250 Met Gln Gly Leu Pro His Ala Leu Pro Tyr Leu Ala Ser Ala Val Pro 260 265 Leu Gly Leu Ala Asn Tyr Ile Phe Asp Leu Glu Asn Ile Glu Ser Ala 275 280 His Ala Ala Gly Asp Glu Tyr Pro Thr Arg Lys Val Met Leu Ala Asn 295 Gly Leu Ala Ser Met Leu Gly Cys Leu Met Gly Asn Pro Phe Pro Val 310 315 Thr Val Tyr Val Gly His Pro Gly Trp Lys Ala Met Gly Ala Ser Ile 325 330 Gly Tyr Thr Leu Ala Ser Gly Val Thr Met Phe Ile Val Pro Leu Phe 340 345 350 Gly Leu Gly Ala Phe Met Leu Ala Ile Ile Pro Met Thr Ala Ile Val 360 365 Pro Ile Leu Val Phe Ile Gly Val Val Thr Ala Asn Gln Val Val Arg

```
Glu Thr Pro Lys Val Glu Val Pro Val Ile Phe Ile Cys Leu Phe Pro
                    390
                                        395
Trp Ile Ala Asn Trp Ala Leu Thr Met Met Asn Ser Val Met Ser Ala
                405
                                    410
Ala Gly Thr Ser Ala Ala Lys Ile Gly Thr Asp Val Leu His Ser Lys
            420
                                425
Gly Ile Tyr Tyr Glu Gly Leu Met His Leu Gly Asn Gly Ala Pro Leu
                            440
                                                445
Ala Ser Met Leu Trp Gly Cys Ile Ala Ile Phe Ala Ile Leu Asn Lys
                        455
                                             460
Pro Leu Arg Gly Ala Val Ala Ala Ala Gly Gly Ala Leu Leu Ala Leu
                                        475
                    470
Phe Gly Val Ile His Ala Pro Val Val Gly Phe Ala Glu Gly Ser Ser
                485
                                     490
Leu Met Phe Val Thr Ala Tyr Leu Met Met Gly Gly Met Phe Val Val
                                505
Lys His Val Leu Asp Thr Ser Val Asn Pro Pro Leu Pro Val Gly Glu
                            520
Gly Arg Gly Glu Gly Thr Arg Thr His Leu Leu Lys Glu Thr Lys
    530
                        535
<210> 10163
<211> 486
<212> PRT
<213> Enterobacter cloacae
<400> 10163
Ser Ser Pro Arg Arg Thr Ala Cys Pro Gln Arg Cys Ala Val Lys Arg
                                    10
Val Pro Ile Leu Leu Met Lys Glu Asp Lys Met Ser Glu Asn Lys Ser
            20
Arg Arg Glu Phe Ile Ser Gln Ser Gly Lys Met Val Thr Ala Cys Ala
                            40
Leu Phe Gly Ala Thr Gly Ser Val Ala Tyr Ala Ala Asp Ser Val Lys
Ala Thr Cys Glu Thr Gly Lys Pro Met Asn Ile Thr Ala Lys His Tyr
                    70
                                                             80
Tyr Leu Asp Asn Val Leu Leu Glu Ala Gly Phe Asn Tyr Asp Gly Ser
                                    90
Val Ala Thr Ser Thr Arg Thr Glu Leu Lys Thr Leu Glu Ile Lys Asp
            100
                                105
Gly Lys Ile Val Ala Leu Arg Asp Asn Gly Ser His Ala Asp Ala Thr
                            120
Leu Pro His Tyr Asp Ala Gly Lys Lys Leu Met Leu Pro Ala Met Arg
                        135
                                             140
Asp Met His Ile His Leu Asp Lys Thr Phe Tyr Gly Gly Pro Trp Arg
                    150
                                         155
Ser Leu Asn Arg Pro Ala Gly Thr Thr Ile Gln Asp Met Ile Arg Leu
                                    170
                165
Glu Gln Lys Leu Leu Pro Glu Leu Gln Pro Tyr Thr Gln Glu Arg Ala
                                185
            180
                                                     190
Glu Lys Leu Ile Asp Leu Ile Gln Ser Lys Gly Ser Thr Ile Ala Arg
                                                 205
```

200

215

230

245

Ser His Cys Asn Ile Glu Pro Val Ser Gly Leu Lys Asn Leu Glu Asn

Leu Gln Ala Val Leu Ala Arg Arg Gly Ala Gly Phe Asp Cys Glu Ile

Val Ala Phe Pro Gln His Gly Leu Leu Ser Asn Ser Glu Lys Leu

Met Arg Glu Ala Met Gln Ala Gly Ala His Tyr Val Gly Gly Leu Asp 265

220

255

235

```
Pro Thr Ser Val Asp Gly Ala Met Glu Lys Ser Leu Asp Thr Met Phe
       275
                            280
Gln Ile Ala Leu Asp Tyr Asp Lys Gly Val Asp Ile His Leu His Glu
                                            300
                        295
Thr Ser Pro Ala Gly Val Ala Ala Val Asn Tyr Met Val Glu Thr Val
                    310
                                        315
Glu Lys Thr Pro Ala Leu Lys Gly Lys Leu Thr Ile Ser His Ala Phe
                325
                                    330
Ala Leu Ala Thr Leu Asn Glu Gln Gln Val Asp Glu Ile Ala Thr Arg
                                345
Met Ala Ala Gln Gln Val Thr Ile Ala Ser Thr Val Pro Ile Gly Thr
                            360
Leu His Met Pro Leu Lys Gln Leu Arg Asp Lys Gly Val Phe Val Met
                        375
                                            380
Thr Gly Thr Asp Ser Val Ile Asp His Trp Ser Pro Tyr Gly Leu Gly
                    390
                                        395
Asp Met Leu Glu Lys Ala Asn Leu Tyr Ala Gln Leu Tyr Ile Arg Pro
                405
                                    410
Asn Glu Gln Thr Leu Ser Arg Ala Leu Gly Ile Ala Thr Gly Asp Val
                                425
                                                     430
            420
Leu Pro Leu Asn Asp Lys Gly Glu Arg Val Trp Pro Lys Ala Gln Asp
        435
                            440
                                                 445
Asp Ala Ser Phe Val Leu Val Asp Ala Ser Cys Ser Ala Glu Ala Val
                        455
                                             460
Ala Arg Ile Ser Pro Arg Thr Ala Thr Phe His Lys Gly Asn Leu Val
                    470
                                        475
Trp Gly Thr Val Ala
                485
<210> 10164
<211> 287
<212> PRT
<213> Enterobacter cloacae
<400> 10164
Pro Leu Arg Asp Leu Asn His Ser His Gly Gly Glu Asn Pro Ala Gln
1
                                    10
Ala Val Ile Tyr Lys Thr Asp Thr Leu Ser Thr Gly Glu Gly Cys Phe
            20
Thr Leu Ala Thr Val Ala Ile Lys Glu Ser Val Met Ala Gln Asn Ile
                            40
Tyr Asp Asn Pro Ala Phe Phe Glu Gly Tyr Ala Gln Leu Pro Arg Ser
                        55
Val Gln Gly Leu Asn Gly Ala Pro Glu Trp Pro Ala Leu Lys Ala Met
Leu Pro Asp Leu Thr Gly Lys Ala Val Val Asp Leu Gly Cys Gly Tyr
                                     90
Gly Trp Phe Cys Arg Ala Ala Arg Glu Leu Gly Ala Ser Asp Val Thr
                                105
Gly Val Asp Ile Ser Glu Lys Met Leu Ala Arg Ala Ala Glu Leu Thr
                            120
Asp Asp Asn Arg Ile His Tyr Gln Arg Ser Asp Leu Glu Ser Leu Ala
                        135
                                            140
Leu Lys Ala Asn Ser Leu Asp Leu Val Tyr Ser Ser Leu Ala Leu His
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Tyr Leu Pro Glu Leu Asp Thr Leu Phe Ala Asn Val Gln Arg Ala Leu

Lys Pro Gly Gly Ser Leu Val Phe Ser Met Glu His Pro Ile Tyr Thr 185

Cys Ala Thr Arg Gln Gly Trp Leu Thr Asp Asp Ser Gly Glu Arg Phe 200

155

190

170

150

Trp Gly Val Asn His Tyr Gln Asp Glu Ser Gln Arg Val Ser Asn Trp 215 220 Leu Ala Asp Gly Val Ile Lys Tyr His Arg Thr Leu Gly Thr Thr Leu 235 230 Asn Ala Leu Ile Lys Ala Gly Leu Thr Ile Ser Glu Val Asn Glu Trp 245 250 Gly Pro Thr Gln Met Gln Val Asp Ala Trp Pro Ala Leu Ala Glu Glu 260 265 Ala Glu Arg Pro Met Leu Val Leu Ile Ala Ala Arg Lys Ala 280 <210> 10165 <211> 301 <212> PRT <213> Enterobacter cloacae <400> 10165 Pro Glu Val Arg Asn Met Asp Lys Leu Arg Gly Met Glu Thr Phe Ile 10 Ala Val Val Glu Ser Gly Ser Phe Thr Gly Ala Ala Arg Leu Glu 25 20 Met Ser Ala Val Met Val Gly Lys Tyr Ile Thr Gln Leu Glu Ser Gln 40 Leu Gly Thr Arg Leu Leu Glu Arg Asn Thr Arg Arg Gln Ser Leu Thr 55 Asp Ala Gly Arg Val Tyr Phe Val Glu Ala Arg Arg Val Leu Glu Gln 70 75 Val Ser Ile Ala Glu Asn Ala Val Glu Arg Leu Arg Ala Thr Pro Ala 90 85 Gly Thr Leu Arg Val Thr Ala Pro Thr Ser Phe Gly Gly Cys Val Ile 100 105 110 Ala Pro Leu Thr Ala Thr Phe Leu Gln Arg Tyr Pro Glu Val Arg Ile 120 125 Glu Leu Asp Leu Thr Asn Arg Met Val Asp Leu Val Glu Glu Gly Val 135 140 Asp Leu Ala Ile Arg Ile Gly Glu Ile Arg Asn Glu Asp Leu Val Ala 150 155 Lys Tyr Leu Cys Pro Tyr Asn Met Thr Ile Cys Ala Ala Pro Asp Tyr 165 170 Leu Ala Arg His Gly Thr Pro Gln Thr Pro Ala Asp Leu Val Asp His 180 185 Leu Cys Leu Ser His Thr Val Trp Thr Ala Arg Asn Glu Trp Arg Leu 200 Pro Gly Val Glu Gly Glu Val Arg Trp Lys Arg Asp Ala Val Leu Arg 215 220 Cys Asn Asp Gly Tyr Gly Leu Arg Met Ala Ala Arg Ala Gly Ala Gly 230 Leu Leu Gln Pro Glu Val Leu Val Ala Glu Glu Leu Ala Ser Gly 250 Arg Leu Val Arg Val Leu Glu Ala Phe Thr Pro Ala Pro Arg Pro Val 265 His Leu Leu Trp Arg Gln Asp Leu Arg Pro Leu Pro Lys Leu Thr Glu 280 Phe Ile Ala His Ile Leu Leu Arg Leu Gly Thr Ile 295 <210> 10166 <211> 248

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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<400> 10166
Thr Gln Leu Lys Glu Gln Asn Met Asn Lys Val Ile Leu Ile Thr Gly
                                    1.0
Ala Ser Ser Gly Ile Gly Glu Gly Ile Ala Arg Glu Leu Gly Lys Ala
                                25
Gly Ala Lys Val Phe Leu Gly Ala Arg Arg Leu Glu Arg Ile His Ala
                            40
Leu Ala Asp Glu Ile Arg Ser Ala Gly Gly Glu Ala Glu Ala Gln Val
Leu Asp Val Thr Ser Arg Gln Ser Met Ala Ala Phe Val Glu Ala Ala
                                        75
Arg Glu Lys Trp Gly Arg Ile Asp Val Leu Ile Asn Asn Ala Gly Ile
                85
Met Pro Leu Ser Pro Leu Ser Ala Gly Lys Gln Asp Glu Trp Glu Arg
            100
                                105
Thr Ile Asp Val Asn Ile Lys Gly Val Leu Trp Gly Ile Gly Ala Val
                            120
Leu Pro Ile Met Glu Ala Gln Asn Ser Gly Gln Ile Ile Asn Ile Gly
                        135
Ser Ile Gly Ala Leu Ser Val Val Pro Thr Ala Ala Val Tyr Cys Ala
                    150
                                        155
Thr Lys Phe Ala Val Arg Ala Ile Ser Asp Gly Leu Arg Gln Glu Ser
                                    170
                165
Ser Asn Ile Arg Val Thr Cys Val Asn Pro Gly Val Val Glu Ser Glu
            180
                                185
Leu Ala Ser Thr Ile Thr His Glu Glu Thr Met Ala Val Met Asp Ala
                            200
Tyr Arg Ala Ile Ala Leu Lys Pro Ala Asp Ile Ala Arg Ala Val Arg
                        215
                                            220
His Ile Ile Glu Ala Pro Glu Ser Val Asp Thr Thr Glu Ile Thr Ile
                    230
                                        235
Arg Pro Thr Ala Ser Ala Asn
                245
```

<210> 10167

<211> 423

<212> PRT

<213> Enterobacter cloacae

<400> 10167

Ile Pro Gly Arg His Arg Gln Arg His Leu Val Leu Thr Ala Leu Gly Gly Arg Met Leu Ser Gln His Val Leu Ile Val Glu Asp Ser Leu Val Tyr Arg Arg Leu Leu Ser Arg Met Leu Thr Gln Trp Gly Tyr Thr Val Tyr Glu Ala Glu Asn Gly Val Ala Ala Leu Glu Ile Leu Glu Asn Gln 55 Pro Val Ser Leu Val Ile Ser Asp Trp Asp Met Pro Glu Met Asp Gly 75 Leu Thr Leu Cys Arg Glu Val Arg Ser Arg Gln Phe Gly His Tyr Val 85 90 Tyr Leu Ile Leu Leu Thr Ala Arg Glu Glu Pro Gly Asp Leu Thr Val 105 100 Gly Phe Asp Ala Gly Ala Asp Asp Phe Leu Asn Lys Pro Val Glu Gln 120 125 Ser Glu Leu Arg Ala Arg Leu His Ala Gly Ala Arg Val Leu Ser Leu 135 140 Glu Ala Thr Leu Ala Thr Arg Asn Ala Arg Leu Ser Glu Ala Leu Arg 150 155 Gln Ile Glu Gln Asp Leu Glu Val Ala Ala Arg Ile Gln Gln Ser Val

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170
                165
Leu Pro Ala His Gln Leu Arg Tyr Arg Asp Tyr Phe Ala Asp Trp Ile
                         185
            180
                                                    190
Phe Leu Pro Ser Ala Trp Val Ser Gly Asp Ile Phe Asn Val Phe Pro
                            200
                                                205
       195
Leu Asp Asn His Leu Gly Phe Tyr Cys Val Asp Val Ser Gly His Gly
                        215
                                            220
Val Gly Ala Ala Met Met Ser Leu Ala Val Ala Arg Gln Phe Leu His
                    230
                                        235
Gly Arg Ala Val Glu Arg Phe Leu Phe Ala Asp Asp Ser Asp Val Ala
                245
                                    250
Ser Pro Ala Glu Val Val Arg Ile Leu Asn Gly Arg Phe Cys Ser Glu
                                 265
Glu Val Glu Ile Met Ser Tyr Phe Thr Met Ile Tyr Gly Val Ile Asp
                            280
Leu Thr Thr Gly Glu Gly Lys Leu Cys Gln Ala Gly His Pro Thr Pro
                        295
Phe Ile Val Asn Pro Gly Gly Glu Val Arg Thr Val Gly Glu Gly Gly
                    310
                                         315
Ala Pro Val Gly Leu Met Pro Asp Leu Ser Trp Ser Asp Val Ser Phe
                325
                                     330
Ser Leu Ala Pro Gly Glu Arg Leu Cys Leu Phe Ser Asp Gly Ile Thr
                                 345
                                                     350
            340
Glu Cys Glu Asn Pro Asp Asn Glu Gln Phe Gly Gln Ala Arg Leu Gln
                             360
                                                 365
Arg Arg Leu Gln Asp Asp Ala Thr Leu Ala Leu Glu Arg Leu Leu Pro
                        375
                                             380
Gln Phe Ala Gln His Leu Ile Arg Trp Arg Ser Gly Lys Tyr Arg Glu
                                         395
                    390
Gln Gln Ala Met Ala Asp Asp Val Ser Leu Leu Val Ile Glu Arg Thr
                405
                                     410
Gly Val Asn Asp Glu His
            420
<210> 10168
<211> 403
<212> PRT
<213> Enterobacter cloacae
<400> 10168
Ser Arg Ser Cys Cys Glu Asn Phe Asn Phe Leu Cys Cys Ile Arg Met
                                     10
Gln Arg Trp Cys Lys Tyr Lys Lys His Pro Leu Ala Glu Ala Phe Glu
            20
                                 25
Ala Arg Ala Asn Gly Gln Asp Val Asp Lys Glu Ser Gly Val Met Lys
                             40
```

Arg Lys Thr Phe Ala 'Ala Val Thr Ser Gln Gln Val Ala Gln Leu Ala 5.5 Gly Val Ser Gln Ser Ala Val Ser Arg Thr Phe Thr Pro Gly Ala Ser 75 Ile Ser Pro Ala Thr Arg Glu Lys Val Leu Lys Ala Ala Arg Glu Leu Gly Tyr Arg Pro Asn Ala Ile Ala Arg Ser Leu Asn Thr Ala Arg Ser 100 105 110 Arg Ile Ile Gly Val Val Ile Ser Tyr Phe Asp Asn Pro Phe Tyr Ser 120 125 Gln Val Leu Glu Ala Leu Ala Gln Lys Leu Asp Thr Leu Asn Tyr His 135 140 Leu Leu Phe Val Gly Asp Arg Glu Gly Asn Val Asp Arg Ile Phe 150 155 Asp Gln Ile Met Gln Tyr Arg Val Asp Gly Ile Val Leu Ala Ser Val

170 165 Thr Leu Ser Leu Glu Leu Ser Glu Glu Cys Leu Ala Ala Gly Ile Pro 180 185 190 Val Val Leu Phe Asn Arg Ser Glu Glu Ser Gly Met Ala Ser Ser Val 200 205 Asn Ser Asn Asn Glu Ala Ala Ala Arg Gln Ile Ala Glu Phe Leu Leu 215 220 Ala Gly Glu His Lys Arg Phe Ala Tyr Val Gly Gly Val Ala Asp Ser 230 235 Pro Val Asn Ile Ala Arg Gln Arg Gly Phe Ile Ser Thr Leu Glu Glu 250 His Gly Ile Thr Asp Val Arg Val Wal His Gly Asn Tyr Asp Ala Gln 265 Gln Thr Thr Arg Ala Ala Tyr Thr Leu Phe Ser Thr Ser Pro Ala Pro 280 Asp Ala Val Phe Val Ala Asn Asp His Met Ala Val Thr Val Met Asp 295 Val Ala Arg Tyr Glu Phe Gly Leu Arg Ile Pro Glu Glu Val Ser Val 310 315 Val Gly Tyr Asp Asp Ile Gly Pro Ser Gly Trp Pro Ser Tyr Ala Leu 325 330 Thr Ser Ala Ser Gln Pro Val Gly Ala Met Val Asp Ala Thr Val Glu 345 340 Leu Leu Met Lys Gln Ile Asp Ser Gly Thr Ile Glu Pro Glu Gln Ile 360 365 355 Thr Val Pro Gly Thr Leu Val Ile Arg His Ser Ala Arg Arg Pro Arg 375 380 Ser Gly Val Ile Glu Thr Asn Gly Leu Thr Leu Phe Gln Ser Lys Glu 395 390 Arg Thr

<210> 10169 <211> 328

<212> PRT

<213> Enterobacter cloacae

<400> 10169 Thr Val Arg Cys Ser Gly Arg Asp Pro Pro Ser Ser Glu Arg Val Glu Ala Gly Tyr Gly Arg Thr Gly His Ile Lys Lys Ser Arg Gly Val Leu 20 25 Arg Lys Ala Val Arg Leu Arg Tyr Ala Phe Ile Arg Asp Asn Ser Arg 40 Cys Trp Pro Val Arg Leu Leu Cys Arg Val Leu Asp Val His Pro Ser 60 Gly Phe Tyr Phe Trp Leu Gln Gln Pro His Ser Gln Arg His Gln Thr 70 75 Asp Gln Met Leu Thr Gly Gln Ile Lys Gln Phe Trp Leu Glu Ser Gly 90 Cys Val Tyr Gly Tyr Arg Lys Ile His Leu Asp Leu Arg Asp Thr Gly 105 Gln Gln Cys Gly Val Asn Arg Val Trp Arg Leu Met Lys Arg Ala Gly 120 115 Ile Lys Ala Gln Val Gly Tyr Arg Ser Pro Arg Ala Arg Lys Gly Glu 135 140 130 Ala Ser Ile Val Thr Pro Asn Arg Leu Gln Arg Gln Phe Asn Pro Asp 155 150 Ser Pro Asp Glu Arg Trp Val Thr Asp Ile Thr Tyr Ile Arg Thr His 170 Glu Gly Trp Leu Tyr Leu Ala Val Val Asp Leu Phe Ser Arg Lys

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180
                                185
                                                    190
Val Ile Gly Trp Ser Met Gln Pro Arg Met Thr Lys Glu Ile Val Leu
                           200
                                                205
Asn Ala Leu Leu Met Ala Val Trp Arg Asn Pro Gln Lys Gln Val
                       215
                                           220
Leu Val His Ser Asp Gln Gly Ser Gln Tyr Thr Ser His Glu Trp Gln
                    230
                                        235
Ser Phe Leu Lys Ser His Gly Leu Glu Gly Ser Met Ser Arg Arg Gly
                245
                                    250
Asn Cys His Asp Asn Ala Val Ala Glu Ser Phe Phe Gln Leu Leu Lys
                                265
Arg Glu Arg Ile Lys Lys Arg Ile Tyr Gly Thr Arg Asp Glu Ala Arg
                            280
Ser Asp Ile Phe Asp Tyr Ile Glu Met Phe Tyr Asn Ser Lys Arg Arg
                        295
His Gly Ser Ser Glu Gln Met Pro Pro Ala Glu Tyr Glu Asn Leu Tyr
                    310
Tyr Gln Arg Leu Arg Ser Val
                325
<210> 10170
<211> 124
<212> PRT
<213> Enterobacter cloacae
<400> 10170
Ser Asn Trp Arg Leu Ala Glu Ser Leu Lys Ser Trp Pro Arg Ile Trp
                                    10
Phe Arg Arg Ser Pro Arg Ala Pro Lys Arg Phe Thr Val Ser His Lys
            20
                                25
Ile Ala Val Glu Val Val Tyr Ala Leu Pro Glu Lys Gln Tyr Leu Gln
        35
Arg Val Thr Leu Glu Glu Gly Ala Thr Val Glu Ala Ala Ile Arg Ala
                        55
Ser Gly Ile Leu Glu Leu Arg Arg Asp Ile Asp Leu Ala Lys Asn Lys
                    70
                                        75
Val Gly Ile Tyr Ser Arg Pro Val Lys Leu Gly Asp Val Leu Lys Glu
                                    90
Gly Asp Arg Val Glu Ile Tyr Arg Pro Leu Ile Ala Asp Pro Lys Glu
            100
                                105
Leu Arg Arg Gln Arg Ala Glu Lys Ser Gly Lys
        115
                            120
<210> 10171
<211> 809
<212> PRT
<213> Enterobacter cloacae
<400> 10171
Arg His Asn Asn Pro Arg Ser Ser Gly Trp Leu Gly Pro Trp Cys Leu
                                    10
                                                        15
Leu Val Gly Val Ile Leu Leu Val Thr Gly Leu Phe Phe Ala Ile Gly
Gly Phe Lys Leu Val Ser Val Gly Gly Ser Trp Tyr Phe Leu Ile Ala
                            40
Gly Val Ile Thr Leu Leu Ser Ala Ile Gln Phe Phe Arg Arg Lys Ser
                        55
Ser Ala Val Gly Leu Phe Ala Leu Val Phe Leu Gly Thr Leu Ile Trp
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Ala Phe Phe Asp Ala Gly Leu Asp Phe Trp Pro Leu Val Ser Arg Leu

Met Val Pro Ala Gly Leu Met Val Leu Ala Ala Ala Thr Trp Pro Ala 100 105 Leu Arg Lys Arg Glu Gly Lys Pro Ser Cys Ala Lys Gly Ala Leu Gly 120 125 115 Val Cys Ala Val Leu Ile Ile Ala Met Gly Val Thr Phe Val Gln Met 135 140 Phe Gln Pro His Pro Thr Val Pro Phe Ser Gly Glu Lys Arg Pro Leu 150 155 Val Pro Val Lys Asp Asp Ala Lys Gln Gln Asn Trp Asp His Tyr Gly 165 170 Asn Thr Ala Gly Gly Ser Arg Phe Val Ala Leu Asp Gln Ile Thr Arg 185 Asp Asn Val Lys Asn Leu Lys Pro Val Trp Thr Tyr His Thr Gly Asp 200 Val Pro Glu Ser Pro Asp Gly Asn Gly Ala Glu Asp Gln Gln Thr Pro 215 Leu Gln Val Gly Asp Arg Val Phe Leu Cys Thr Pro His Asn Asn Val 230 235 Ile Ala Val Asp Ala Asp Ser Gly Lys Glu Ile Trp Lys Ala Glu Ile 245 250 Asn Ala Lys Ser Ala Ile Trp Met Arg Cys Arg Gly Leu Ala Tyr Phe 265 260 Asp Ala Thr Lys Pro Leu Ala Gln Pro Thr Val Ala Gly Ser Thr Pro 280 285 Val Leu Pro Ala Gln Val Ala Pro Gly Ala Ala Cys Gln Arg Arg Ile 295 300 Leu Met Asn Thr Ile Asp Gly Lys Leu Ile Ala Leu Asp Ala Asp Asn 310 315 Gly Lys Phe Cys Pro Asp Phe Gly Thr Asn Gly Ser Val Asn Leu His 325 330 Glu Gly Met Gly Asp Ala Ser Asp Pro Thr Tyr Val Leu Thr Ser Ala 340 345 Pro Thr Leu Ala Gly Thr Thr Val Val Gly Gly Arg Val Ala Asp 360 365 Asn Val Ser Thr Asp Met Pro Gly Gly Val Ile Arg Gly Tyr Asp Val 375 380 Ile Thr Gly Gln Leu Arg Trp Ala Phe Asp Pro Arg Asn Pro Asp Pro 390 395 Asn Tyr Val Leu Lys Pro Gly Glu His Tyr Lys Arg Ser Ser Ala Asn 405 410 Ser Trp Ala Pro Met Ser Trp Asp Ala Ser Met Asn Thr Val Phe Ile 420 425 Pro Met Gly Ser Ser Ser Val Asp Leu Trp Gly Ala Asp Arg Ile Pro 440 Glu Asp His Lys Tyr Ala Thr Ser Ile Leu Ala Leu Asp Ala Thr Thr 455 460 Gly Lys Glu Lys Trp Val Tyr Gln Thr Val His Asn Asp Leu Trp Asp 470 475 Phe Asp Ile Pro Met Gln Pro Ser Leu Val Asp Phe Pro Thr Lys Glu 485 490 Gly Asn Lys Pro Ala Val Val Gly Thr Lys Ala Gly Gln Ile Tyr 505 Val Leu Asp Arg Leu Thr Gly Lys Pro Leu Thr Glu Val Lys Glu Val 520 Pro Val Lys Pro Ala Asp Ile Pro Arg Glu Gln Tyr Pro Ala Thr Gln 535 540 Pro Arg Ser Val Gly Met Pro Gln Ile Gly Ala Glu Thr Leu Lys Glu 550 555 Ser Asp Met Trp Gly Ala Thr Pro Phe Asp Gln Leu Ala Cys Arg Ile 570 Ser Phe Lys Ser Met Arg Tyr Asp Gly Leu Tyr Thr Met Pro Gly Thr

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580
                                585
Asp Ile Ser Leu Ser Phe Pro Gly Ser Leu Gly Gly Met Asn Trp Gly
                           600
                                                605
Ser Leu Ser Thr Asp Pro Asn Asn Gln Tyr Ile Phe Val Asn Asp Met
                       615
                                            620
Arg Leu Gly Leu Trp Val Gln Leu Ile Lys Gln Asp Pro Gln Ser Ala
                   630
                                        635
Val Ala Asn Thr Gly Gly Glu Ala Val Asn Ala Gly Met Gly Ala Val
                                    650
Pro Met Lys Gly Thr Pro Tyr Ser Val Asn Lys Asn Arg Phe Met Ser
                                665
Pro Leu Gly Ile Pro Cys Gln Lys Pro Pro Phe Gly Ser Leu Ser Ala
                            680
Ile Asp Leu Lys Thr Gln Lys Ile Val Trp Gln Val Pro Val Gly Thr
                        695
                                            700
Val Gln Asp Thr Gly Pro Phe Gly Val Lys Met Arg Met Gln Met Pro
                    710
                                        715
Val Gly Met Pro Thr Leu Gly Gly Thr Leu Ala Thr Gln Gly Gly Leu
                                    730
                725
Val Phe Ile Ala Gly Thr Gln Asp Tyr Tyr Leu Arg Ala Phe Asp Ser
                                745
Ser Thr Gly Glu Glu Val Trp Lys Ala Arg Leu Pro Val Gly Ser Gln
        755
                            760
Gly Gly Pro Ile Ser Tyr Val Ser Pro Lys Thr Gly Lys Gln Tyr Ile
                        775
                                            780
Leu Ile Ser Ala Gly Gly Ala Arg Gln Ser Pro Asp Arg Gly Asp Tyr
                    790
                                        795
Val Ile Ala Tyr Ala Leu Asp Lys
                805
<210> 10172
<211> 126
<212> PRT
<213> Enterobacter cloacae
<400> 10172
Leu Asn Arg Val His Ala Asn Arg Gln Asn Ser Arg Arg Ser Arg Pro
Met Gln Gln Phe Glu Trp Ile His Ala Ala Trp Leu Ala Phe Ala Ile
            20
                                25
Val Leu Glu Ile Ile Ala Asn Val Phe Leu Lys Phe Ser Asp Gly Phe
Arg Arg Lys Ala Tyr Gly Leu Leu Ser Ile Ala Ala Val Leu Gly Ala
Phe Ser Ala Leu Ser Gln Ala Val Lys Gly Ile Asp Leu Ser Val Ala
Tyr Ala Leu Trp Gly Gly Phe Gly Ile Ala Ala Thr Leu Ala Ala Gly
Trp Ile Met Phe Gly Gln Arg Leu Asn Asn Lys Gly Trp Ile Gly Leu
                                105
Val Leu Leu Ala Gly Met Ile Met Ile Lys Leu Ala
        115
                            120
<210> 10173
<211> 306
<212> PRT
<213> Enterobacter cloacae
<400> 10173
Tyr Phe Lys Asn Met Asn Ile Glu Leu Arg His Leu Arg Tyr Phe Val
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```
Ala Val Ala Glu Glu Leu His Phe Gly Arg Ala Ala Arg Leu Asn
            20
                                25
Ile Ser Gln Pro Pro Leu Ser Gln Gln Ile Gln Ile Leu Glu Gln Gln
                            40
Val Gly Ala Arg Leu Leu Ala Arg Thr Asn Arg Ser Val Ser Leu Thr
                        55
Ala Ala Gly Lys Gln Phe Leu Ala Asp Ser Arg Gln Ile Leu Ser Met
                    70
                                        75
Val Glu Asp Ala Ala Ala Arg Ala Glu Arg Leu Tyr Leu Gly Glu Thr
                                    90
Gly Glu Leu Arg Ile Gly Phe Thr Ser Ser Ala Pro Phe Ile Ser Ala
                                105
Val Ser Gln Thr Leu Ser Ser Phe Arg Arg Asn Phe Pro Asp Val His
                            120
Ile Gln Thr Arg Glu Ile Asn Thr Arg Glu Gln Ile Ser Pro Leu Asn
                        135
                                            140
Glu Gly Ser Leu Asp Leu Gly Leu Met Arg Asn Thr Gln Leu Pro Asp
                    150
                                        155
Thr Leu Ala Trp Gln Val Ile Leu Arg Glu Pro Leu Met Ala Met Ile
                                    170
               165
Pro Arg Asp His Pro Leu Ala Ala Gln His Ser Val Thr Leu Ala Glu
            180
                                185
Leu Ala Lys Glu Pro Phe Val Phe Phe Asp Pro Gln Val Gly Thr Gly
                            200
                                                205
       195
Leu Tyr Asp Asp Ile Leu Gly Leu Met Arg Arg Tyr Gly Leu Val Pro
                                            220
                        215
Thr Ile Ala Gln Glu Val Gly Glu Ala Met Thr Ile Ile Gly Leu Val
                    230
                                        235
Ala Ala Gly Leu Gly Val Ser Ile Leu Pro Ala Ser Phe Lys Arg Val
                245
                                    250
Gln Leu Ala Glu Met Arg Trp Val Lys Ile Ala Glu Gln Asp Ala Val
            260
                                265
Ser Glu Met Trp Leu Val Trp Ser Lys His His Glu Gln Ser His Ala
                            280
Ala Gln Arg Phe Lys Glu Gln Leu Ile Thr Ala Ser Arg Gly His Tyr
                        295
Leu
305
<210> 10174
<211> 229
<212> PRT
<213> Enterobacter cloacae
<400> 10174
Gly Ser Glu Met Thr Lys Ile Thr Pro Glu Tyr Thr Val Val Asp Leu
Ser Arg Trp Ala Arg Lys Glu His Phe Glu Val Phe Gln Gly Phe Ala
Gln Ser Thr Phe Asn Gln Thr Val Gln Leu Asp Ile Thr Val Leu Leu
Lys His Ile Lys Glu Val Gly Trp Lys Phe Tyr Pro Ala Ile Ile Ser
                        55
Leu Ile Ser His Val Val Asn Arg His Pro Glu Phe Arg Met Ala Met
                    70
                                        75
Lys Asp Asp Glu Leu Val Ile Trp Asn Glu Val His Pro Ser Tyr Thr
                                    90
Leu Phe His Lys Glu Thr Glu Thr Phe Ser Ser Leu Trp Ser His Tyr
                                105
            100
Asp Gly Asn Ile His His Phe Gln Arg Val Tyr Ala Glu Asp Val Ala
```

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Arg Tyr Gly Asn Ile Leu Ala Tyr Trp Pro Lys Glu Glu Ser Arg Glu
   130
                        135
                                            140
Asn Ile Phe Phe Ile Ser Asp Ile Pro Trp Val Ser Phe Ser Ser Phe
                    150
                                        155
Asn Val Asn Val Ala Asn Met Arg Asn Phe Phe Ala Pro Met Phe Thr
                165
                                    170
Phe Gly Lys Tyr Tyr Asn Gln Asp Glu Lys Val Leu Leu Pro Phe Ala
            180
                                185
Val Gln Val His His Ser Val Cys Asp Gly Phe His Val Ala Arg Met
                            200
Ile Asn Glu Leu Gln Glu Leu Cys Asp Asn Leu Pro His His Ser Glu
                        215
Ala Pro Asn Val
225
<210> 10175
<211> 241
<212> PRT
<213> Enterobacter cloacae
<400> 10175
Thr Val Asn Asp Val Asn Lys Tyr Ala Ala Ile Thr Leu Leu Ala Thr
                                    10
Val Leu Val Gly Cys Asp Asn Asn Thr Ala Pro Leu Ser Phe Thr Pro
            20
                                25
Glu Met Ala Ser Phe Ser Asn Glu Phe Asp Phe Asp Pro Leu Arg Gly
                            40
Pro Val Lys Asp Phe Thr Gln Thr Leu Phe Asn Asp Lys Gly Glu Val
                        55
Ser Lys Arg Val Thr Gly Thr Met Ser Thr Glu Gly Cys Phe Asp Thr
                    70
                                        75
Leu Glu Leu His Asp Leu Glu Ala Asn Thr Gly Val Ala Leu Val Leu
                85
                                    90
Asp Ala Asn Tyr Tyr Val Asp Ala Glu Thr Gln Gln Lys Val Lys
                                105
            100
                                                     110
Leu Gln Gly Lys Cys Gln Leu Ala Glu Leu Pro Ser Ala Gly Leu Thr
        115
                            120
                                                 125
Trp Asp Thr Asp Asp Asn Gly Phe Val Val Ala Ala His Ser Lys Glu
                        135
Met Glu Val Lys Tyr Gln Tyr Asp Ala Asp Gly Tyr Pro Leu Gly Lys
                    150
                                        155
Thr Thr Val Ser Gly Asp Gln Arg Leu Ser Val Lys Ser Val Pro Ser
                                    170
Lys Asp Leu Arg Lys Arg Met Asp Tyr Thr Ala Val Ser Leu Leu Asn
                                185
Asp Lys Pro Met Gly Asn Val Lys Gln Ser Cys Asp Tyr Asp Arg His
                            200
Asn Asn Pro Val Asn Cys Glu Leu Leu Ile Thr Asp Asp Ser Val Lys
Pro Ala Val Glu Arg Lys Tyr Thr Ile Lys Asn Ser Ile Glu Tyr Tyr
```

<sup>&</sup>lt;210> 10176

<sup>&</sup>lt;211> 372

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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10
Pro Ser Gly Arg Arg His Ser Leu Glu Leu Val Asn Glu Glu Arg Met
                                25
Met Lys Ser Val Val Ile Gln Gln Pro Asn Ala Leu Glu Ile Glu Glu
                            40
                                                 4.5
Arg Pro Leu Pro Leu Pro Gly Ala Gly Asp Val Arg Val Lys Ile Lys
                        55
                                             60
Leu Ala Gly Ile Cys Gly Ser Asp Ser His Ile Tyr Arg Gly His Asn
                    70
                                        75
Pro Phe Ala Lys Tyr Pro Arg Val Ile Gly His Glu Phe Phe Gly Glu
                85
                                    90
Ile Asp Ala Val Gly Glu Gly Val Glu Gly Thr Arg Leu Gly Gln Arg
                                105
Val Ser Val Asp Pro Val Ile Ser Cys Gly His Cys Tyr Pro Cys Ser
                            120
                                                 125
Val Gly Lys Pro Asn Val Cys Thr Ser Leu Val Val Leu Gly Val His
                        135
Arg Asp Gly Gly Phe Ser Glu Tyr Ala Val Val Pro Ala Lys Asn Ala
                    150
                                        155
Trp His Ile Pro Asp Ala Ile Pro Asp Lys His Ala Val Met Val Glu
                165
                                    170
Pro Phe Thr Ile Ala Ala Asn Val Thr Gly Gln Ala Lys Pro Thr Glu
                                185
            180
Gln Asp Val Ala Leu Ile Tyr Gly Ala Gly Pro Met Gly Leu Val Thr
                            200
                                                 205
Val Gln Ala Leu Lys Gly Val Tyr Lys Val Lys Gln Val Ile Val Val
                        215
                                             220
Asp Arg Ile Asp Glu Arg Leu Glu Met Ala Gln Arg Ser Gly Ala Asp
                    230
                                        235
                                .
Trp Val Phe Asn Asn Gly Glu Gln Ser Leu Gln Thr Ala Leu Asp Glu
                                    250
                245
Lys Gly Ile Lys Pro Thr Leu Ile Ile Asp Ala Ala Cys His Pro Ser
            260
                                265
Ile Leu Gln Glu Ala Ile Thr Leu Ala Ser Pro Ala Ala Arg Ile Val
                            280
                                                 285
Leu Met Gly Phe Ser Ser Asp Pro Ser Gln Ile Val Gln Gln Gly Ile
                        295
                                             300
Thr Gly Lys Glu Leu Ser Ile Phe Ser Ser Arg Leu Asn Ala Asn Lys
                    310
                                        315
Phe Pro Val Val Ile Asp Trp Leu Glu Lys Gly Leu Ile Asp Pro Glu
                325
                                    330
Lys Leu Val Thr His Thr Phe Asp Tyr His His Val Thr Asp Ala Ile
            340
                                345
                                                     350
Glu Leu Phe Glu Lys Asp Gln Arg Gln Cys Cys Lys Val Leu Leu Thr
                            360
Phe Asp Gln
   370
<210> 10177
<211> 679
<212> PRT
<213> Enterobacter cloacae
<400> 10177
Thr Met Ser Val Asn Asn Pro Phe Phe Glu Ile Ser Leu Leu Pro Tyr
                                    10
Gln Ala Pro Arg Phe Asp Ala Ile Asn Asp Ser His Tyr Arg Pro Ala
            20
                                25
```

Phe Asp Glu Ala Met Arg Leu Lys Arg Ala Asp Ile Asp Ala Ile Ile

Ala Gln Arg Ala Ala Pro Asp Phe Asp Asn Thr Val Leu Ala Leu Glu

55 Lys Ser Gly Ala Met Leu Ser Arg Val Ser Ser Val Phe Phe Ala Met 75 70 Thr Ser Ala His Thr Asn Asp Asp Leu Gln Ala Leu Asp Glu Gln Phe 90 85 Ser Thr Glu Leu Ala Gly Leu Ala Asn Asp Ile Trp Leu Asn Asp Thr 105 100 Leu Phe Ala Arg Val Glu Ala Val Trp Gln Asp Arg Glu Ala Leu Asp 120 125 Ala Glu Ser Arg Arg Leu Thr Glu Glu Thr Tyr Gln His Phe Val Leu 135 140 Ala Gly Ala Arg Leu Asn Ala Asp Glu Lys Ala Glu Leu Lys Ser Leu 150 155 Asn Thr Glu Ala Ala Thr Leu Thr Ser Gln Phe Asn Gln Arg Leu Leu 170 Ala Ala Asn Lys Ala Gly Gly Leu Val Val Asp Asp Val Arg Gln Leu 180 185 Asp Gly Leu Ser Ala Glu Glu Met Ala Ala Ala Ala His Ala Ala Ala 200 Glu Lys Gly Leu Lys Glu Arg Trp Leu Ile Pro Leu Leu Asn Thr Thr 215 220 Gln Gln Pro Ala Leu Ala Ala Leu Ala Leu Arg Glu Thr Arg Lys Lys 235 230 Leu Phe Ser Ala Gly Trp Glu Arg Thr Gln Lys Gly Asp Glu Asn Asp 250 245 Thr Arg Glu Leu Ile Arg Arg Leu Thr Ala Leu Arg Ala Arg Gln Ala 260 265 Gln Leu Leu Gly Phe Asp Asn Tyr Ala Ser Trp Ser Ile Ala Asp Gln 280 Met Ala Lys Thr Pro Glu Ala Ala Leu Glu Phe Met Arg Gly Ile Val 295 300 Pro Ala Ala Arg Gly Arg Ala Ala Leu Glu Gln Ala Asp Ile Gln Lys 310 315 Val Ile Asp Asp Glu Gln Gly Gly Phe Thr Val Gln Ala Trp Asp Trp 330 325 Ala Phe Tyr Ala Glu Arg Val Arg Ser Ala Lys Tyr Ala Leu Asp Glu 345 340 Ser Gln Ile Lys Pro Tyr Phe Ala Leu Asn Thr Val Leu Glu Asp Gly 360 Val Phe Trp Thr Ala Thr Gln Leu Phe Gly Ile Arg Phe Val Glu Arg 375 380 Phe Asp Ile Pro Val Tyr His Pro Asp Val Arg Val Trp Glu Ile Phe 390 395 Asp His Thr Gly Glu Gly Met Ala Leu Phe Tyr Gly Asp Phe Phe Ala 405 410 Arg Asp Ser Lys Ala Gly Gly Ala Trp Met Gly Asn Phe Val Glu Gln 425 Ser Tyr Glu Phe Ala Ala Arg Pro Val Ile Tyr Asn Val Cys Asn Tyr 440 Gln Lys Pro Ala Asn Gly Gln Thr Ala Leu Ile Ser Trp Asp Asp Val 455 460 Ile Thr Leu Phe His Glu Phe Gly His Thr Leu His Gly Leu Phe Ala 470 475 Ser Gln Arg Tyr Ala Thr Leu Ser Gly Thr Asn Thr Pro Arg Asp Phe 490 485 Val Glu Phe Pro Ser Gln Ile Asn Glu His Trp Ala Ser His Pro Gln 500 505 Val Phe Ala His Phe Ala Arg His Tyr Gln Thr Gly Glu Pro Met Pro 520 525 Asp Ala Leu Arg Glu Lys Met Leu Asn Ala Thr Gln Phe Asn Lys Gly 535

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Tyr Asp Met Thr Glu Leu Leu Ser Ala Ala Leu Leu Asp Met Asn Trp
                    550
                                        555
His Gly Ile Gln Glu Pro Val Glu Asp Val Glu Ala Phe Glu Ala Ala
                                    570
                565
Ala Leu Lys Lys Glu Gly Leu Asp Leu Pro Ala Val Pro Pro Arg Tyr
            580
                                585
                                                     590
Arg Ser Ser Tyr Phe Ala His Ile Phe Gly Gly Gly Tyr Ala Ala Gly
        595
                            600
                                                 605
Tyr Tyr Ala Tyr Leu Trp Thr Gln Met Leu Ala Asp Asp Gly Tyr Gln
                        615
                                             620
Trp Phe Val Glu Gln Gly Gly Leu Thr Arg Glu Asn Gly Gln Thr Phe
                    630
                                        635
Arg Glu Ala Ile Leu Ser Arg Gly Asn Ser Thr Asp Leu Ala Glu Leu
                                    650
Tyr Arg Asn Trp Arg Gly His Asp Pro Lys Ile Glu Pro Met Leu Glu
                                665
Asn Arg Gly Leu Ser Ala
        675
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<210> 10178

<211> 275 <212> PRT

<213> Enterobacter cloacae

275

<400> 10178 Ile Gly His Lys Glu Thr Gly Val Arg Asn Val Lys Ile Glu Glu Val 10 Glu Gln Leu Asp Arg Glu Val Val Ala Ile Gly Asn Asp Tyr Val Gln 20 25 Gly Phe Met Leu Pro Gln His Lys His Arg Arg Ala Gln Leu Leu Tyr 40 Gly Ala Thr Gly Leu Met His Val Ile Thr Gln Asp Gly Glu Trp Ile 55 Val Pro Pro Gln His Ala Val Trp Ile Pro Pro Glu Thr Met His Ala 70 75 Val Lys Phe Val Gly Val Thr Thr Arg Ser Leu Tyr Ile Glu Pro Asp 90 85 Phe Val Asn Ala Phe Leu Lys Tyr Pro Arg Cys Glu Val Ile Ser Val 100 105 110 Ser Pro Leu Leu Arg Gln Leu Leu Glu Ser Val Asp Leu Pro Pro 120 125 Leu Tyr Glu Ser Thr Arg Asp Arg Ala Leu Ile Asn Leu Met Ile Leu 135 140 Glu Leu Ala Ala Met Pro Val Arg Glu Phe Asp Ile Pro Leu Pro Arg 150 155 His Pro Ala Leu Leu Ala Leu Cys Gln Ala Phe Leu Leu Asn Pro Ser 170 Ile His Asp Pro Ala Glu Arg Trp Ala Asn Ala Leu Phe Met Ser Asp 185 Ser Thr Phe Arg Arg His Phe Leu Lys Gln Met Gly Met Ser Phe Ser 200 Val Trp Arg Gln Arg Ala Cys Val Val Ser Ala Leu Ala Leu Leu Ile 215 220 Thr Gly Lys Pro Val Asn Glu Val Ala Leu Thr Leu Gly Tyr Asp Asn 230 235 Ala Ser Ser Phe Ala Thr Met Phe Arg Arg Val Thr Gly Gln Pro Pro 245 250 Ser Tyr Tyr His Pro Ala Leu Phe Lys Lys Phe His Gly Thr Gly His 265 Arg Ser

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<210> 10179
<211> 165
<212> PRT
<213> Enterobacter cloacae
<400> 10179
Ile Met Ile Asn Lys Ile Leu Val Ser Ala Cys Leu Met Gly Leu Lys
                                    10 ·
Val Arg Tyr Asn Gly Lys Glu Lys Ala Gln Met Thr His Gln Leu Ala
                                25
Arg Trp Gln Glu Gln Arg Leu Val Ile His Cys Pro Glu Leu Ala
                            40
Ala Gly Leu Pro Val Pro Arg Pro Pro Ala Glu Ile Met Ser Ala Glu
Gly Lys Asp Val Met Arg Gly Gln Ala Arg Ile Ile Glu Asn Thr Gly
                                        75
Thr Asp Val Thr Gly His Tyr Gln Leu Ala Ala Trp Leu Ala Leu Arg
Ala Ala Gln Glu Ala Gly Cys Thr Ala Ala Leu Leu Thr Asp Gly Ser
                                105
Pro Thr Cys Gly Thr Gln Phe Ile Tyr Asn Gly Ser Phe Ser Asn Gln
        115
                            120
Arg Lys Ser Gly Met Gly Val Ala Ala Ser Leu Leu Ser Glu His Gly
                        135
Ile Ala Val Phe Ser Glu Thr Gln Phe Ala Glu Leu Val Asn Trp Ile
                    150
                                        155
Glu Glu Arg Glu
                165
<210> 10180
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 10180
Ile Tyr Arg Phe Ile Asn Arg Arg Asn Asp Met Lys Lys Ala Leu Leu
Gly Ser Val Leu Ala Leu Thr Val Ala Ser Phe Gly Ala Ser Ala Ala
                                25
Asp Met Ile Ser Lys Asp Glu Ala His His Phe Lys Leu Glu Tyr Leu
                            40
Gly Asn Val Ser Val Gly Ala Ser Gly Gly Gln Ile Ser Ser Pro Ser
                        55
Asp Leu His Gln Lys Leu Ser Lys Leu Ala Asp Glu Lys Gly Gly Lys
                    70
                                        75
Tyr Tyr Val Ile Ile Ala Ala Arg Glu His Gly Pro Asn Phe Gln Ala
                                    90
Val Ala Glu Val Phe Lys
            100
<210> 10181
<211> 530
<212> PRT
<213> Enterobacter cloacae
<400> 10181
Gln Ser Glu Cys His Thr Asp Lys Ser Arg Asn Ala Ile Pro Leu Leu
               5
                                    10
Asp Cys Ile His Thr Leu Arg Ser Ile Thr Lys Glu Tyr Pro Met Ser
```

Glu Ser His Val Ala Ile Leu Pro Gly Val Gln Gln Phe Leu Asp Arg 40 Gln His Gly Leu Trp Ile Glu Gly Arg Gln Ala Ala Ser Asp Ser Glu 55 60 Lys Arg Leu Asn Val Tyr Asn Pro Ala Thr Gly Glu Val Ile Ala Ser 70 75 Thr Ala Asp Ala Ser Val Asp Asp Val Asp Arg Ala Val Met Ser Gly 85 90 Trp Arg Ala Phe Val Ala Arg Ser Trp Ala Gly Arg Leu Pro Ala Glu 105 Arg Glu Arg Ile Leu Leu Arg Phe Ala Asp Leu Val Glu Gln His Gly 120 Glu Glu Leu Ala Gln Leu Glu Thr Leu Glu Gln Gly Lys Ser Ile Asn 135 140 Ile Ser Arg Ala Phe Glu Val Gly Cys Thr Leu Asn Trp Met Arg Tyr 150 155 Thr Ala Gly Leu Thr Thr Lys Ile Ala Gly Lys Thr Leu Asp Leu Ser 170 165 Ile Pro Leu Pro Gln Gly Ala Arg Tyr Gln Ala Trp Thr Arg Lys Glu 185 190 180 Pro Val Gly Val Val Ala Gly Ile Val Pro Trp Asn Phe Pro Leu Met 195 200 Ile Gly Met Trp Lys Val Met Pro Ala Leu Ala Ala Gly Cys Ser Ile 210 215 220 Val Ile Lys Pro Ser Glu Thr Thr Pro Leu Thr Leu Leu Arg Val Ala 235 230 Glu Leu Ala Ser Glu Ala Gly Ile Pro Asp Gly Val Phe Asn Val Val 250 245 Thr Gly Ser Gly Ala Val Cys Gly Ala Ala Leu Thr Ser His Pro Arg 260 265 ·Ile Ala Lys Val Ser Phe Thr Gly Ser Thr Ala Thr Gly Lys Gln Ile 275 280 285 Ala Arg Val Ala Ala Asp Thr Leu Thr Gly Val Thr Leu Glu Leu Gly 295 300 Gly Lys Asn Pro Ala Ile Val Leu Lys Asp Ala Asp Pro Ala Trp Val 310 315 Ile Glu Gly Leu Met Thr Gly Ser Phe Leu Asn Gln Gly Gln Val Cys 330 325 Ala Ala Ser Ser Arg Ile Tyr Ile Glu Ala Pro Leu Phe Asp Thr Leu 345 Val Ser Gly Phe Glu Gln Ala Val Lys Ser Leu Ser Val Gly Pro Gly 360 Met Ser Pro Asp Ala Phe Ile Asn Pro Leu Val Ser Arg Ala His Cys 375 Asp Lys Val Gln Ala Phe Leu Asp Glu Ala Lys Ala His Asn Ala Glu 390 395 Leu Ile Ala Gly Asn Arg Gly Pro Asp Gly Lys Gly Tyr Tyr Val Ser 410 Pro Thr Leu Val Val Asn Pro Asp Asn His Leu Arg Leu Thr Arg Glu 425 Glu Val Phe Gly Pro Val Val Asn Leu Val Arg Val Asp Asp Gly Glu 440 445 Glu Ala Leu Gln Leu Ala Asn Asp Thr Glu Tyr Gly Leu Thr Ala Ser 455 460 Val Trp Thr.Gln Asn Ile Ser Lys Ala Leu Ala Tyr Thr Asp Arg Leu 470 475 Gln Ala Gly Thr Val Trp Val Asn Ser His Thr Leu Ile Asp Ala Asn 485 490 Leu Pro Phe Gly Gly Met Lys Gln Ser Gly Thr Gly Arg Asp Phe Gly 505 Pro Asp Trp Leu Asp Gly Trp Cys Glu Thr Lys Ser Val Cys Val Arg

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520
        515
                                                 525
Tyr
   530
<210> 10182
<211> 333
<212> PRT
<213> Enterobacter cloacae
<400> 10182
Leu Leu Arg Asn Gln Met Ile His His Phe Ala Ile Cys Gly Asp Leu
Thr Asn His Lys Gly Gly Tyr Val Thr Gln Glu Gln Arg Phe Glu Gln
                                25
Arg Ile Ala Gln Glu Thr Ala Ile Glu Pro Gln Asp Trp Met Pro Asp
Ala Tyr Arg Lys Thr Leu Ile Arg Gln Ile Gly Gln His Ala His Ser
                        55
Glu Ile Val Gly Met Leu Pro Glu Gly Asn Trp Ile Thr Arg Ala Pro
                    70
                                         75
Thr Leu Arg Arg Lys Ala Ile Leu Leu Ala Lys Val Gln Asp Glu Ala
                                    90
                85
Gly His Gly Leu Tyr Leu Tyr Ser Ala Ala Glu Thr Leu Gly Cys Ala
            100
                                105
Arg Glu Asp Ile Tyr Gln Lys Met Leu Asp Gly Lys Met Lys Tyr Ser
                            120
        115
Ser Ile Phe Asn Tyr Pro Thr Leu Ser Trp Ala Asp Ile Gly Val Ile
                                             140
                        135
Gly Trp Leu Val Asp Gly Ala Ala Ile Val Asn Gln Val Ala Leu Cys
                    150
                                        155
Arg Thr Ser Tyr Gly Pro Tyr Ala Arg Ala Met Val Lys Ile Cys Lys
                165
                                    170
Glu Glu Ser Phe His Gln Arg Gln Gly Phe Glu Ala Cys Met Ala Leu
            180
                                185
Ala Gln Gly Ser Glu Ala Gln Arg Gln Met Leu Gln Asp Ala Ile Asn
                            200
        195
                                                 205
Arg Phe Trp Trp Pro Ala Leu Met Met Phe Gly Pro Asn Asp Asp Asn
                        215
                                             220
Ser Pro Asn Ser Ala Arg Ser Leu Ala Trp Lys Ile Lys Arg Phe Gly
                    230
                                         235
Asn Asp Glu Leu Arg Gln Arg Phe Val Asp Asn Thr Val Pro Gln Val
                                    250
Glu Met Leu Gly Met Thr Val Pro Asp Pro Asp Leu Arg Phe Asp Glu
                                265
Glu Ser Gly His Tyr Arg Phe Gly Glu Ile Asp Trp Gln Glu Phe Asp
                            280
Glu Val Ile Asn Gly Arg Gly Ile Cys Asn His Glu Arg Leu Ala Ala
                        295
Lys Arg Lys Ala Trp Asp Asp Gly Ala Trp Val Arg Glu Ala Ala Leu
                    310
                                        315
Ala His Ala Glu Lys Gln Arg Ala Arg Gln Ala Ala
                325
<210> 10183
<211> 100
<212> PRT
<213> Enterobacter cloacae
<400> 10183
Glu Glu Ser Thr Met Ser Asn Val Tyr Trp Pro Leu Tyr Glu Val Phe
                                    10
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Val Arg Ser Lys Gln Gly Leu Ser His Arg His Val Gly Ser Leu His
            20
                                25
Ala Ala Asp Asp Arg Met Ala Leu Glu Asn Ala Arg Asp Ala Tyr Thr
                            40
Arg Arg Ser Glu Gly Cys Ser Ile Trp Val Val Lys Ala Ser Glu Ile
                        55
                                             60
Val Ala Ser Gln Pro Glu Glu Ser Gly Glu Phe Phe Asp Pro Ala Glu
                    70
                                        75
Ser Lys Val Tyr Arg His Pro Thr Phe Tyr Thr Ile Pro Asp Gly Ile
                                    90
Glu His Met
            100
<210> 10184
<211> 266
<212> PRT
<213> Enterobacter cloacae
<400> 10184
Arg Thr Leu Ile Val Glu Ser Ile Leu Ser His Val Glu Gln Gly Val
                                    10
Met Thr Ile Thr Leu Asn Arg Pro Glu Arg Leu Asn Ser Phe Asn Asp
            20
                                25
Val Met His Gln Gln Leu Ser Glu Cys Leu Lys Gln Ala Glu Arg Asp
Asp Ala Ile Arg Cys Leu Leu Ile Ile Gly Ala Gly Arg Gly Phe Cys
                        55
Ala Gly Gln Asp Leu Asn Asp Arg Asn Val Asp Pro Asn Gly Pro Ala
                    70
                                        75
Pro Asp Leu Gly Met Ser Val Glu Thr Phe Tyr Asn Pro Leu Val Arg
                                     90
Arg Leu Ala Lys Leu Pro Lys Pro Val Ile Cys Ala Val Asn Gly Val
            100
                                105
                                                     110
Ala Ala Gly Ala Gly Ala Thr Leu Ala Leu Gly Cys Asp Met Val Ile
        115
                            120
                                                 125
Ala Ala Arg Ser Ala Ser Phe Val Met Ala Phe Ser Lys Leu Gly Leu
                        135
Val Pro Asp Cys Gly Gly Thr Trp Leu Leu Pro Arg Val Ala Gly Arg
                    150
Ala Arg Ala Met Gly Leu Ala Leu Leu Gly Asp Lys Leu Ser Ala Glu
                165
                                    170
Gln Ala Gln Ala Trp Gly Met Ile Trp Gln Val Val Asp Asp Glu Gln
                                185
                                                     190
Leu Ser Ala Thr Val Gln Gln Met Ala Leu His Phe Ala Ser Gln Pro
                            200
                                                 205
Thr Phe Gly Leu Gly Leu Ile Lys Gln Ala Ile Asn Ala Ala Glu Thr
                        215
Asn Thr Leu Asp Ala Gln Leu Asp Leu Glu Arg Asp Tyr Gln Arg Leu
Ala Gly Arg Ser Asp Asp Tyr Arg Glu Gly Val Ser Ala Phe Leu Ala
                245
                                    250
Lys Arg Ala Pro Asn Phe Thr Gly Lys
<210> 10185
<211> 444
<212> PRT
<213> Enterobacter cloacae
<400> 10185
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Cys Glu Tyr Pro Ala Met Ile Asn Thr Thr Lys Leu Asp Pro Ile Glu

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Thr	Ala	Ser	Ile 20	Asp	Glu	Leu	Gln	Ala 25	Leu	Gln	Thr	Ala	Arg 30	Leu	Lys
_	Thr	35				_	40					45		-	-
Phe	Asp 50	Ala	Ala	Gly	Val	His 55	Pro	Asp	Asp	Phe	Asn 60	Glu	Leu	Ala	Asp
65	Gln				70					75					80
	Phe	_		85					90					95	
	Ser		100				-	105				_	110		
	Asp	115					120					125			
	Gly 130	_			_	135	_				140	_	_	_	_
145					150					155					Gly 160
	Thr			165			_	_	170			_		175	
	Ile	_	180				_	185					190		_
	Leu	195					200					205		_	
	Ala 210					215					220				
225	Ala		_	_	230			_	_	235	_				240
	Ile			245					250					255	
	Leu		260					265					270		
	Glu	275					280					285			
	Gly 290					295					300				
305	Arg	_	_		310	_			_	315			_		320
	Thr			325					330					335	
	Ile		340					345					350		
	Val	355					360			_		365			
_	Arg 370	_			_	375				_	380			_	
385	Ser				390					395					400
	Arg			405	_				410				_	415	
	Val		420					425			GTA	Lys	Ala 430	Cys	Arg
Val	Phe	Asp 435	Leu	Arg	гуs	val	Ala 440	Ala	Asn	GIY					

<sup>&</sup>lt;210> 10186 <211> 321 <212> PRT <213> Enterobacter cloacae

<400> 10186 Phe Ile Gln Glu Lys Asn Asn Asn Arg Met Asn His Met Asn Lys Leu 10 Asp Ala Phe Ile Gln His Ala Val Ser Ser Val Pro Val Ser Gly Thr 25 Ser Leu Ile Ser Ser Leu Tyr Gly Asp Ala Leu Ala His Arg Gly Gly 40 Glu Ile Trp Leu Gly Ser Leu Ala Ala Leu Leu Glu Gly Met Gly Phe 55 60 Gly Glu Arg Phe Val Arg Thr Ala Leu Phe Arg Leu Asn Lys Glu Gly 70 75 Trp Leu Asp Val Ser Arg Ile Gly Arg Arg Ser Phe Tyr Arg Leu Ser 90 Asp Lys Gly Leu Arg Leu Thr Arg Arg Ala Glu Asn Lys Ile Tyr Arg 105 Ala Glu Leu Pro Ala Trp Asp Gly Lys Trp Leu Leu Leu Ser Glu 120 Gly Leu Asp Lys Thr Thr Leu Ala Asp Val Lys Lys Gln Leu Ile Trp 135 140 Gln Gly Phe Gly Thr Leu Ala Pro Ser Leu Met Ala Ser Pro Ser Gln 150 155 Asn Leu Ala Asp Val Gln Ser Leu Leu His Asp Ala Gly Val Ala Glu 165 170 Asn Val Ile Phe Phe Glu Ala His Ser Pro Leu Ala Leu Ser Arg Ala 185 180 Ala Leu Arg Ser Arg Val Glu Glu Cys Trp Gln Leu Thr Glu Gln Asn 195 200 205 Ala Met Tyr Glu Thr Phe Ile Asn Ser Phe Arg Pro Leu Leu Pro Leu 215 220 Leu Lys Glu Thr Pro Pro Glu Asp Leu Thr Pro Glu Arg Cys Phe Gln 230 235 Ile Gln Leu Leu Ile His Phe Tyr Arg Arg Val Val Leu Lys Asp 245 250 Pro Leu Leu Pro Glu Glu Leu Leu Pro Ala His Trp Ala Gly Gln Ser 260 270 265 Ala Arg Gln Leu Cys Ile Asn Ile Tyr Gln Arg Val Ala Ala Gly Ala 280 285 Leu Ala Phe Val Ser Glu Lys Gly Glu Thr Ser Val Gly Glu Leu Pro 295 300 Ala Pro Gly Thr Leu Tyr His Gln Arg Phe Gly Gly Leu Asn Ile Thr 310 315

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<210> 10187
<211> 205
<212> PRT
<213> Enterobacter cloacae
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85 90 Asn Ala Leu Val Gly Met Asn Ala Val Val Met Asp Gly Ala Thr Ile 105 100 Gly Glu Asn Ser Ile Val Gly Ala Ala Ala Phe Val Lys Ala Lys Ala 120 125 Glu Met Pro Ala Asn His Leu Ile Leu Gly Ser Pro Ala Lys Ala Ile 135 140 Arg Glu Leu Ser Ala Gln Glu Ile Glu Trp Lys Lys Gln Gly Thr Arg 150 155 Glu Tyr Gln Val Leu Val Asp Arg Cys Lys Gln Thr Leu His Gln Val 170 Glu Pro Leu Arg Glu Glu Glu Pro Gly Arg Lys Arg Leu Val Phe Asp 185 Glu Asn Leu Arg Pro Lys Ser Ala Gly Arg Asp Lys <210> 10188 <211> 516 <212> PRT <213> Enterobacter cloacae

<400> 10188 Ser Gly Val Asn Leu Val Cys Arg His Ala Ala Pro Arg Leu Gly Thr 10 Glu Arg Asp Cys Arg His Gly Arg Phe Thr Arg Phe Cys Arg His Ala 20 25 Ala Asp Pro Gln Lys Arg Phe Pro Asp Ala Gly Pro Gly Gln Arg Gly 40 Gly Arg Arg Pro Arg His Ser Ser Arg Ser Gly Lys Arg Glu Gly Ser 55 His Arg Val Ser Arg Arg Val Gln Pro Gly Ala Ala Pro Ala Phe Arg 70 75 Pro Ala Arg Cys Thr Ser Ala Arg Thr Ala Ala Gln Asp Gly Ala Thr 90 Met Lys Ile Ala Ile Ile Gly Ser Gly Ile Ala Gly Leu Thr Cys Ala 100 105 110 Trp Arg Leu Ala Gly His His Gln Ile Thr Val Phe Glu Ala Gln Ala 120 Thr Pro Gly Gly His Thr Ala Thr Val Asp Val Asp Thr Pro Gln Ser 135 140 Thr Phe Ala Ile Asp Thr Gly Phe Ile Val Tyr Asn Asp Arg Thr Tyr 150 155 Pro Arg Phe Met Gly Leu Leu Ser Glu Leu Gly Ile Ser Gly Gln Lys 170 165 Thr Gln Met Ser Phe Ser Val His Asn Pro Gln Ser Gly Leu Glu Tyr 185 Asn Gly His Thr Leu Thr Ser Leu Phe Ala Gln Arg Arg Asn Leu Leu 195 200 205 Asn Pro Ala Phe Trp Thr Leu Leu Lys Glu Ile Val Arg Phe Asn Arg 215 220 Leu Ala Lys Gln Thr Leu Arg Gly Glu Val Asp Gly Ser Ala Thr Leu 230 235 Glu Thr Phe Leu Arg Gln His Arg Phe Thr Pro Phe Phe Ala Arg His 250 245 Tyr Ile Leu Pro Met Gly Ala Ala Ile Trp Ser Ser Leu Gln Glu 260 265 Met Lys Arg Phe Pro Leu Pro Leu Phe Leu Arg Phe Phe Glu Asn His 280 285 Gly Leu Leu Asp Ile Thr His Arg Pro Gln Trp Tyr Val Val Pro Gly 295 300 Gly Ser Arg Glu Tyr Ile Arg Ala Met Met Asp Lys Leu Gly Asp Arg

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310
                                        315
Leu Thr Leu His Leu Asn Ala Pro Val Gln Lys Val Val Arg His Asp
               325
                                    330
Arg Gly Val Asp Ile Glu Arg Glu Gly Val Thr His Thr Phe Asp Gln
           340
                                345
Val Ile Phe Ala Cys His Ser Ala Gln Ala Leu Ala Met Leu Ala Ser
                            360
                                                365
Pro Thr Gln Ala Glu Arg Glu Val Leu Gly Asp Ile Gly Trp Gln Arg
                        375
                                            380
Asn Glu Val Val Leu His Ser Asp Pro Arg Trp Leu Pro Val Arg Lys
                    390
                                        395
Arg Ala Trp Ala Ser Trp Asn Tyr Arg Leu Ser Glu Gln Asp Arg Ala
                405
                                    410
Ser Ala Cys Val Thr Tyr Asn Met Asn Ile Leu Gln Gly Leu Pro Pro
                                425
Gly Ser Pro Leu Phe Cys Val Thr Leu Asn Pro Glu Thr Pro Val Glu
                            440
Glu Arg Tyr Val Leu Arg Arg Phe Val Tyr Glu His Pro Leu Phe Asn
                        455
                                            460
Pro Gln Ser Trp Gln Ala Gln Ala Arg Arg Gly Glu Ile Asn Gly Arg
                    470
                                        475
Gln Arg Ser Trp Phe Cys Gly Ala Tyr Trp Tyr Asn Gly Phe His Glu
                                    490
               485
Asp Gly Val Arg Ser Ala Leu Asp Val Val Asn Ala Ile Ala Ala Gly
                                505
Glu Gly Asn
       515
<210> 10189
<211> 409
<212> PRT
<213> Enterobacter cloacae
<400> 10189
Thr Leu Met Thr Asp Pro Val Phe Ala Leu Glu Pro Asp Ile Pro Arg
Asn Val Arg Val Ala Arg Trp Leu Leu Phe Arg Leu Leu Asn Gly Leu
                                25
Arg Gly Gly Ser Leu Thr Leu Arg Glu Gly Ala Gln Thr Phe Gln Phe
                            40
Gly Asp Ala Ser Ala Ala Leu His Ala Glu Val Gln Val Leu Ala Pro
                        55
Gly Val Tyr Trp Arg Ile Leu Thr Gly Gly Ser Leu Ala Ala Gln
                    70
                                        75
Ala Trp Met Asp Gly Asp Trp Glu Thr Pro His Leu Thr Pro Leu Leu
               85
                                    90
Glu Leu Ile Ala Arg Asn Ser Gln Ile Leu Gly Gln Leu Glu Lys Gly
                                105
Phe Arg Leu Gly Lys Pro Val Glu Arg Leu Arg His Trp Met Arg
                            120
                                                125
Arg Asn Ser Arg Ala Gln Ala Arg Glu Asn Ile Ala Ala His Tyr Asp
                        135
                                            140
Leu Gly Asn Ala Phe Tyr Ala His Phe Leu Asp Glu Asp Leu Leu Tyr
                    150
                                        155
Ser Ser Ala Leu Phe Asn Gly Asp Glu Gln Asp Leu Asn Ala Ala Gln
               165
                                    170
Gln Ala Lys Met Ala Arg Leu Cys Asp Gln Leu Ala Leu Thr Ala Asn
```

Asp His Leu Leu Glu Ile Gly Thr Gly Trp Gly Ala Met Ala Glu Tyr 195 200 205 Ala Ala Arg His Tyr Gly Cys Arg Val Thr Thr Thr Leu Ser Gln

190

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220
                        215
Glu Gln Tyr His Trp Ala Thr Ala Arg Ile Val Arg Ala Gly Leu Gln
                   230
                                       235
Asp Arg Val Glu Val Leu Cys Asp Tyr Arg Asp Leu Thr Gly Val
                245
                                . 250
Tyr Asp Lys Leu Val Ser Val Glu Met Ile Glu Ala Val Gly Gln Arg
            260
                                265
                                                    270
Tyr Leu Pro Thr Phe Phe Arg Thr Cys Gln Ala Arg Leu Arg Pro Gly
                            280
Gly Arg Met Ala Ile Gln Ala Ile Thr Ile Gln Asp Gln Arg Tyr Arg
                        295
                                            300
Asp Tyr Ser Lys Ser Val Asp Phe Ile Gln Arg Tyr Ile Phe Pro Gly
                    310
                                        315
Gly Phe Leu Pro Ser Ile Thr Ala Met Asn Glu Leu Met Thr Arg His
                325
                                    330
Thr Asp Phe Val Val Arg Asn Leu Phe Asp Met Gly Pro Asp Tyr Ala
            340
                                345
Arg Thr Leu Ala His Trp Arg Gln Arg Phe Val His Ala Trp Gln Glu
                            360
                                                365
Ile Glu Lys Leu Gly Phe Asp Asp Arg Phe Arg Arg Met Trp Leu Tyr
                        375
                                            380
Tyr Leu Gly Tyr Cys Glu Ala Gly Phe Asn Ala Arg Thr Ile Ser Val
                    390
                                        395
Val Gln Leu Thr Ala Glu Arg Val
                405
<210> 10190
<211> 1314
<212> PRT
<213> Enterobacter cloacae
<400> 10190
Lys Glu Ile Leu Ser Gly Ser Ala Leu Pro Val Asn Ala Met Thr Glu
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His Gln Lys Leu Thr Phe Pro Met Leu Met Gln Lys Leu Asp Ser Leu
            20
                                25
Met Leu Arg Asp Lys Gln Arg Phe Ala Arg Arg Leu His Gly Val Lys
                            40
Lys Val Lys Asn Pro Asp Ala Gln Gln Ala Ile Tyr Gln Glu Met Ala
                        55
                                            60
Lys Glu Ile Glu Gln Ala Ala Gly Lys Val Val Leu Arg Glu Ala Ala
                    70
                                        75
Arg Pro Glu Ile Thr Tyr Pro Glu Asn Leu Pro Val Ser Gln Lys Lys
                                    90
Gln Asp Ile Leu Glu Ala Val Arg Asp His Gln Val Val Ile Val Ala
                                105
Gly Glu Thr Gly Ser Gly Lys Thr Thr Gln Leu Pro Lys Ile Cys Met
                            120
Glu Leu Gly Arg Gly Leu Lys Gly Leu Ile Gly His Thr Gln Pro Arg
                        135
                                            140
Arg Leu Ala Ala Arg Thr Val Ala Asn Arg Ile Ala Glu Glu Leu Gln
                    150
                                        155
Thr Glu Pro Gly Gly Cys Ile Gly Tyr Lys Val Arg Phe Ser Asp His
                165
                                    170
Val Ser Asp Asn Thr Met Val Lys Leu Met Thr Asp Gly Ile Leu Leu
            180
                                185
                                                    190
Ala Glu Ile Gln Gln Asp Arg Leu Leu Met Gln Tyr Asp Thr Ile Ile
                            200
                                                205
Ile Asp Glu Ala His Glu Arg Ser Leu Asn Ile Asp Phe Leu Leu Gly
                        215
                                            220
```

Tyr Leu Lys Glu Leu Leu Pro Arg Arg Pro Asp Leu Lys Ile Ile Ile

225					230					235					240
Thr	Ser	Ala	Thr	Ile 245	Asp	Pro	Glu	Arg	Phe 250	Ser	Lys	His	Phe	Asn 255	Asn
Ala	Pro	Ile	11e 260	Glu	Val	Ser	Gly	Arg 265	Thr	Tyr	Pro	Val	Glu 270	Val	Arg
Tyr	Arg	Pro 275	Ile	Val	Glu	Glu	Ala 280	Asp	Asp	Thr	Glu	Arg 285	Asp	Gln	Leu
Gln	Ala 290	Ile	Phe	Asp	Ala	Val 295	Asp	Glu	Leu	Gly	Asn 300	Glu	Ser	Ser	Gly
Asp 305	Ile	Leu	Ile	Phe	Met 310	Ser	Gly	Glu	Arg	Glu 315	Ile	Arg	Asp	Thr	Ala 320
Asp	Ala	Leu	Ser	Lys 325	Arg	Asp	Leu	Arg	Tyr 330	Thr	Glu	Ile	Leu	Pro 335	Leu
_		_	340		Asn			345		_			350		
	_	355	_		Val		360					365			
	370		_		Lys	375					380				
385		-		-	Arg 390		_			395					400
				405	Ala			-	410	_	-	_	_	415	
		_	420		Ile			425					430		
_		435			Asp		440					445			
	450				Thr	455					460				
465					Pro 470	_		-		475		_	_		480
				485	Gly				490					495	
_	_		500		Leu	_	-	505					510		_
	-	515			Met Ile		520					525			
_	530				Lys	535					540		-		_
545			•		550 Ser					555					560
				565	Gln				570					575	
_		-	580		Phe			585					590		
	_	595		_	Leu		600			_		605	•	=	
_	610	_			Ala	615				_	620		_		
625					630 His		_	-		635					640
	_			645	Asn		-		650	_		_	_	655	
		_	660	-				665					670		_
		675	_		Pro Gly	-	680					685			
	690				Gln	695					700		·		
705	Giu	110	var	ATG	710	1173	υσα	БСИ	пуз	715	JGI	ı yı	Jer	Jiu	720

His Trp Glu Arg Gly Gln Gly Ala Val Met Ala Thr Glu Lys Val Thr Val Tyr Gly Leu Pro Val Val Ala Ala Arg Lys Val Asn Tyr Ser Gln Ile Asp Pro Ala Leu Ser Arg Glu Leu Phe Ile Arg His Ala Leu Val Glu Gly Asp Trp Gln Thr Arg His Ala Phe Phe Arg Glu Asn Leu Lys Leu Arg Ala Glu Val Glu Glu Leu Glu His Lys Ser Arg Arg Arg Asp Ile Leu Val Asp Asp Glu Thr Leu Phe Glu Phe Tyr Asp Gln Arg Ile Ser His Asp Val Ile Ser Ala Arg His Phe Asp Ser Trp Trp Lys Lys Ala Ser Lys Glu Thr Pro Asp Leu Leu Asn Phe Glu Lys Ser Met Leu Ile Lys Glu Gly Ala Glu Ser Val Ser Lys Leu Asp Tyr Pro Asn Phe Trp His Gln Gly Asn Leu Lys Leu Arg Leu Thr Tyr Gln Phe Glu Pro Gly Ala Asp Ala Asp Gly Val Thr Val His Ile Pro Leu Pro Leu Leu Asn Gln Val Asp Glu Ser Gly Phe Glu Trp Gln Ile Pro Gly Leu Arg Arg Glu Leu Val Ile Ala Leu Ile Lys Ser Leu Pro Lys Pro Val Arg Arg Asn Phe Val Pro Ala Pro Asn Tyr Ala Glu Ala Phe Leu Gly Arg Val Thr Ser Leu Glu Leu Pro Leu Leu Asp Ala Leu Glu Arg Glu Phe Arg Arg Met Thr Gly Thr Thr Ile Asp Arg Asp Asp Trp Asn Trp Asp Gln Val Pro Asp His Leu Lys Ile Thr Phe Arg Val Val Asp Asp Lys Asn Lys Lys Leu Met Glu Gly Arg Ser Leu Ser Glu Leu Lys Asp Ala Leu Lys Gly Lys Val Gln Glu Thr Leu Ser Ala Val Ala Asp Asp Gly Ile Glu Gln Ser Gly Leu His Ile Trp Ser Phe Gly Gln Leu Pro Glu Ser Tyr Glu Gln Lys Arg Gly Asn Tyr Lys Val Lys Ala Trp Pro Ala Leu Val Asp Glu Arg Asp Ser Val Ala Ile Lys Leu Phe Asp Asn Pro Gln Glu Gln Gln Met Met Trp Arg Gly Leu Arg Arg Leu Leu Leu Leu Asn Ile Pro Ser Pro Ile Lys Tyr Leu His Glu Lys Leu Pro Asn Lys Ala Lys Leu Gly Leu Tyr Phe Asn Pro Tyr Gly Lys Val Leu Asp Leu Ile Asp Asp Cys Ile Ser Cys Gly Val Asp Lys Leu Ile His Glu Ala Gly Gly Pro Val Trp Thr Glu Glu Gly Phe Ala Gln Leu His Glu Lys Val Arg Ala Glu Leu Asn Asp Thr Val Val Glu Ile Ala Lys Gln Val Glu Gln Ile Leu Thr Ala Val Phe Asn Ile Asn Lys Arg Leu Lys Gly Arg Val Asp Met Thr Met Ala Leu Gly Leu Ser Asp Val Lys Ala Gln Met Ala Gly Leu Val Tyr Arg Gly Phe Val Thr Gly Asn Gly Phe

1205 1210 Lys Arg Leu Gly Asp Thr Leu Arg Tyr Leu Gln Ala Ile Glu Lys Arg 1220 1225 Leu Glu Lys Met Ala Val Asp Pro His Arg Asp Arg Ala Gln Met Leu 1235 1240 1245 Lys Val Glu Asn Val Gln Gln Ala Trp Gln Gln Trp Leu Asn Lys Leu 1255 1260 Pro Pro Ala Arg Arg Asp Asp Asp Asp Val Arg Glu Ile Arg Trp Met 1270 1275 Ile Glu Glu Leu Arg Val Ser Phe Phe Ala Gln Gln Leu Gly Thr Pro 1290 1285 Tyr Pro Ile Ser Asp Lys Arg Ile Leu Gln Ser Met Glu Gln Ile Ser 1305 Gly

<210> 10191 <211> 354 <212> PRT

<400> 10191

<213> Enterobacter cloacae

Arg Asn Ala Leu Ser Gly Tyr Ser Thr Met Lys Lys Ile Gly Phe Leu Ser Phe Gly His Trp Thr Pro Ser Pro Gln Ser Gly Thr Arg Thr Ala 20 25 Ala Asp Thr Leu Leu Gln Ser Ile Asp Leu Val Val Ala Ala Glu Glu 40 Leu Gly Ala Asp Gly Ala Tyr Phe Arg Val His His Phe Ala Arg Gln 5.5 Leu Ser Ser Pro Phe Pro Leu Leu Ala Ala Ile Gly Ala Lys Thr Lys 70 75 Arg Ile Glu Ile Gly Thr Gly Val Ile Asp Met Arg Tyr Glu Asn Pro 8.5 90 Leu Tyr Met Ala Glu Asp Ala Gly Ala Ala Asp Leu Ile Ser Gly Gly 100 105 110 Arg Leu Gln Leu Gly Ile Ser Arg Gly Ser Pro Glu Gln Val Ile Asp 120 Gly Trp Arg Tyr Phe Gly Tyr Val Pro Gln Glu Gly Glu Thr Glu Ser 135 140 Asp Met Ala Arg Arg His Thr Glu Val Leu Leu Asp Val Leu Arg Gly 150 155 Glu Gly Phe Ala Lys Pro Asn Pro Gln Pro Met Phe Pro Asn Pro Pro 170 Gly Leu Leu Arg Leu Glu Pro His Ser Glu Gly Leu Arg Asp Arg Ile 185 Trp Trp Gly Ala Gly Ser Asn Ala Thr Ala Val Trp Ala Ala Lys Leu 200 Gly Met Asn Leu Gln Ser Ser Thr Leu Lys Asp Asp Glu Thr Gly Glu 215 220 Pro Phe His Ile Gln Gln Ala Lys Gln Ile Arg Ala Tyr Arg Gln Ala 230 235 Trp Ala Glu Ala Gly His Thr Arg Gln Pro Arg Val Ser Val Ser Arg 245 250 Ser Ile Phe Ala Leu Met Asp Glu Arg Asp Arg Met Tyr Phe Gly Ser 265 Ser Arg Asn Glu Ser Asp Ser Val Gly Tyr Leu Asp Glu Lys Thr Arg 280 285 Ala Ile Phe Gly Arg Ser Tyr Ala Ala Glu Pro Asp Lys Leu Ile Glu 295 300 Gln Leu Lys Lys Asp Glu Ala Ile Ala Glu Ala Asp Thr Leu Leu Leu

<210> 10192 <211> 430 <212> PRT <213> Enterobacter cloacae

<400> 10192

Arg Gln Pro Leu Lys Cys Phe Thr Ile Ala Leu Ser Leu Phe Arg Ser 10 Ser Lys Ile Arg Glu Tyr Glu Val Val Ala Asp Ser Gln Pro Gly His 25 Ile Asp Gln Ile Lys Gln Thr Asn Ala Gly Ala Val Tyr Arg Leu Ile 40 Asp Gln Leu Gly Pro Val Ser Arg Ile Asp Leu Ser Arg Leu Ala Gln 55 Leu Ala Pro Ala Ser Ile Thr Lys Ile Val Arg Glu Met Leu Glu Ala 70 75 His Leu Val Gln Glu Thr Glu Ile Gln Glu Pro Gly Ser Arg Gly Arg 90 Pro Ala Val Gly Leu Val Val Glu Thr Glu Ala Trp His Tyr Leu Ser 100 105 110 Leu Arg Ile Ser Arg Gly Glu Ile Phe Leu Ala Leu Arg Asp Leu Ser 120 115 125 Ser Lys Leu Val Val Glu Asp Arg Leu Glu Leu Pro Leu Asn Ala Glu 130 135 140 Gln Pro Leu Leu Asp Ala Ile Leu Thr His Ile Asp Gln Phe Phe Ile 150 155 Arg His Gln Gln Arg Leu Glu Arg Leu Thr Ala Ile Ala Ile Thr Leu 165 170 Pro Gly Ile Ile Asp Thr Glu Asn Gly Ile Val His Arg Met Pro Phe 180 185 190 Tyr Glu Asn Val Lys Glu Met Pro Leu Gly Asp Val Leu Glu Asn His 200 205 Thr Gly Val Pro Val Tyr Ile Gln His Asp Ile Ser Ala Trp Thr Met 215 Ala Glu Ala Leu Phe Gly Ala Ser Arg Gly Ala Arg Asp Val Ile Gln 230 Val Val Ile Asp His Asn Val Gly Ala Gly Val Ile Thr Asp Gly Arg 245 250 Leu Leu His Ala Gly Ser Ser Leu Val Glu Ile Gly His Thr Gln 265 Val Asp Pro Tyr Gly Lys Arg Cys Tyr Cys Gly Asn His Gly Cys Leu 280 Glu Thr Ile Ala Ser Val Glu Ser Val Leu Glu Leu Ala Gln Val Arg 295 300 Leu Thr Gln Ser Met Ser Ser Thr Leu His Gly Gln Pro Leu Ser Val 310 315 Glu Ala Leu Cys Ala Ala Ala Arg Gln Gly Asp Leu Leu Ala Lys Asp 330 325 Ile Ile Thr Gly Val Gly Asn Asn Val Gly Arg Ile Leu Ala Ile Met 340 345 350 Val Asn Leu Phe Asn Pro Gln Lys Ile Leu Ile Gly Ser Pro Leu Ser 360

Gln Ala Ala Asp Ile Leu Phe Pro Ala Ile Ser Ala Cys Ile Asn Gln

```
370
                        375
                                            380
Gln Ala Leu Pro Ala Tyr Ser Lys Asn Ile Val Val Glu Ser Thr Gln
                   390
                                       395
Phe Ser Asn Gln Gly Thr Met Ala Gly Ala Ala Leu Val Lys Asp Ala
               405
                                   410
Met Tyr Asn Gly Ser Leu Leu Ile Arg Leu Leu Gln Gly
            420
                                425
<210> 10193
<211> 233
<212> PRT
<213> Enterobacter cloacae
<400> 10193
Val Met Leu Lys Arg Phe Phe Ile Thr Gly Thr Asp Thr Ser Val Gly
                                    10
Lys Thr Val Val Ser Arg Ala Leu Leu Gln Ala Leu Ala Ala Ser Gly
            20
                                25
Lys Arg Val Ala Gly Tyr Lys Pro Val Ala Lys Gly Ser Lys Glu Thr
                            40
Pro Glu Gly Leu Arg Asn Lys Asp Ala Leu Val Leu Gln Ser Val Ser
                        5.5
Ser Leu Glu Leu Pro Tyr Asp Ala Val Asn Pro Ile Ala Leu Ser Glu
                    70
                                        75
Glu Glu Ser Ser Val Ala His Ser Gly Leu Ile Asn Tyr Ser Leu Leu
               85
                                    90
Ser Asp Gly Leu Ala Asn Leu Ser Glu Lys Val Asp His Val Val
            100
                                105
Glu Gly Thr Gly Gly Trp Arg Ser Leu Met Asn Asp Leu Arg Pro Leu
                            120
                                                125
Ser Glu Trp Val Val Gln Glu Gln Leu Pro Val Ile Met Val Val Gly
                        135
                                            140
Ile Gln Glu Gly Cys Ile Asn His Ala Leu Leu Thr Ala Gln Ala Ile
                    150
                                        155
Ala Asn Asp Gly Leu Pro Leu Ile Gly Trp Val Ala Asn Arg Val Asn
                165
                                    170
Pro Gly Leu Ala His Tyr Ala Glu Ile Ile Asp Val Leu Ser Lys Lys
            180
                                185
Leu Pro Gly Pro Leu Val Gly Glu Leu Pro Tyr Leu Pro Arg Ala Glu
       195
                            200
Gln Arg Glu Leu Ala His Tyr Ile Asp Leu Ser Ala Phe Gly Gly Met
                        215
Leu Ala Val Gly Arg Val Val Ala
                    230
<210> 10194
<211> 117
<212> PRT
<213> Enterobacter cloacae
<400> 10194
Ile Asn Pro His Glu Thr Arg Lys Met Phe Lys Thr Thr Leu Leu Phe
                                    10
Phe Ala Thr Ala Leu Cys Glu Ile Ile Gly Cys Phe Leu Pro Trp Leu
                                25
Trp Leu Lys Arg Gly Ala Ser Ala Leu Leu Leu Ile Pro Ala Gly Val
       35
                            40
Ser Leu Ala Leu Phe Val Trp Leu Leu Thr Leu His Pro Ala Ala Ser
                        55
                                            60
Gly Arg Val Tyr Ala Ala Tyr Gly Gly Val Tyr Val Cys Thr Ala Leu
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Leu Trp Leu Arg Val Val Asp Gly Val Arg Leu Ser Leu Tyr Asp Trp 85 90 Ala Gly Ala Leu Ile Ala Leu Cys Gly Met Leu Ile Ile Val Ala Gly 100 105 Trp Gly Arg Ala 115 <210> 10195 <211> 418 <212> PRT <213> Enterobacter cloacae <400> 10195 Ile Ser Cys Ile Thr Thr Ser Asp Val Arg Lys Trp Ile Met Lys Ile 10 Val Gly Ala Glu Val Phe Val Thr Cys Pro Gly Arg Asn Phe Val Thr 20 25 Leu Lys Ile Thr Thr Asp Glu Gly Ile Val Gly Leu Gly Asp Ala Thr 40 45 Leu Asn Gly Arg Glu Leu Ser Val Ala Ser Tyr Leu Lys Asp His Leu 55 Cys Pro Gln Leu Ile Gly Arg Asp Ala His Arg Ile Glu Asp Ile Trp 70 75 Gln Phe Phe Tyr Lys Gly Ala Tyr Trp Arg Arg Gly Pro Val Thr Met 85 90 Ser Ala Ile Ser Ala Val Asp Met Ala Leu Trp Asp Ile Lys Ala Lys 105 100 110 Ala Ala Asn Met Pro Leu Tyr Gln Leu Leu Gly Gly Ala Ser Arg Glu 120 125 Gly Val Met Val Tyr Cys His Thr Thr Gly His Thr Ile Asp Asp Val 135 Leu Glu Asp Tyr Ala Arg His Lys Glu Met Gly Phe Lys Ala Ile Arg 150 155 Val Gln Cys Gly Val Pro Gly Met Lys Thr Thr Tyr Gly Met Ala Lys 165 170 Gly Lys Gly Leu Ala Tyr Glu Pro Ala Thr Lys Gly Ala Trp Pro Glu 185 190 Glu Gln Leu Trp Ser Thr Glu Lys Tyr Leu Asp Phe Thr Pro Lys Leu 200 205 Phe Asp Ala Val Arg Ser Gln Phe Gly Phe Ser Glu His Leu Leu His 215 Asp Met His His Arg Leu Thr Pro Ile Glu Ala Ala Arg Phe Gly Lys 230 235 Ser Ile Glu Asp Tyr Arg Leu Phe Trp Met Glu Asp Pro Thr Pro Ala 250 Glu Asn Gln Glu Cys Phe Arg Leu Ile Arg Gln His Thr Val Thr Pro 265 Ile Ala Val Gly Glu Val Phe Asn Ser Ile Trp Asp Cys Lys Gln Leu 280 285 Ile Glu Glu Gln Leu Ile Asp Tyr Ile Arg Ala Thr Ile Thr His Ala 295 300 Gly Gly Ile Thr Gly Met Arg Arg Ile Ala Asp Phe Ala Ser Leu Tyr 310 315 Gln Val Arg Thr Gly Ser His Gly Pro Ser Asp Leu Ser Pro Ile Cys 330 325 His Ala Ala Leu His Phe Asp Leu Trp Val Pro Asn Phe Gly Val 340 345 His Glu Tyr Met Gly Tyr Ser Glu His Met Leu Glu Val Phe Pro His 355 360 365 Ser Trp Arg Phe Asp Asn Gly Tyr Met His Pro Gly Asp Lys Pro Gly

375

Leu Gly Ile Glu Phe Asp Glu Lys Leu Ala Ala Lys Tyr Pro Tyr Asp 385 390 395 400

Pro Ala Tyr Leu Pro Val Ala Arg Leu Glu Asp Gly Thr Leu Trp Asn 405 410 415

Trp

<210> 10196 <211> 479 <212> PRT <213> Enterobacter cloacae

<400> 10196 Glu Pro Ala Lys Thr Gly Ser Lys Trp Tyr Ala Ser Tyr Leu Ser Glu 10 Ile Ala Ile Met Thr Gln Ala Gln Pro Gln Arg Ser Thr Ser Asp Leu 20 25 Val Lys Ala Ala Val Ser Gly Trp Leu Gly Thr Ala Leu Glu Phe Met 40 Asp Phe Gln Leu Tyr Ser Leu Gly Ala Ala Leu Val Phe His Glu Ile 55 Phe Phe Pro Glu Gln Ser Ala Ala Met Ala Leu Ile Leu Ala Met Gly 70 75 Thr Tyr Gly Ala Gly Tyr Ile Ala Arg Ile Val Gly Ala Phe Ile Phe 85 90 Gly Arg Met Gly Asp Arg Ile Gly Arg Lys Lys Val Leu Phe Ile Thr 100 105 110 Ile Thr Met Met Gly Ile Cys Thr Thr Leu Ile Gly Val Leu Pro Thr 115 120 125 Tyr Ala Gln Ile Gly Ile Phe Ala Pro Val Leu Leu Val Thr Leu Arg 135 140 Ile Ile Gln Gly Leu Gly Ala Gly Ala Glu Ile Ser Gly Ala Gly Thr 150 155 Met Leu Ala Glu. Tyr Ala Pro Lys Gly Lys Arg Gly Ile Ile Ser Ser 165 170 Leu Val Ala Met Gly Thr Asn Cys Gly Thr Leu Ser Ala Thr Ala Ile 180 185 Trp Ala Val Met Phe Phe Ala Leu Asp Arg Glu Glu Leu Ile Ala Trp 200 Gly Trp Arg Val Pro Phe Leu Ala Ser Val Val Wet Ile Phe Ala 215 220 Ile Trp Leu Arg Met Asn Leu Lys Glu Ser Pro Val Phe Glu Lys Val 230 235 Asn Asp Ala Glu Thr Val Ala Pro Ala Ala Ala Gln Asp Thr Ser Leu 250 Gly Ala Met Phe Lys Ser Lys Ser Phe Trp Leu Ala Thr Gly Leu Arg 265 Phe Gly Gln Ala Gly Asn Ser Gly Leu Ile Gln Thr Phe Leu Ala Gly 280 Tyr Leu Val Gln Thr Leu Leu Phe Asp Lys Ala Ile Pro Thr Asp Ala 295 300 Leu Met Ile Ser Ser Ile Leu Gly Phe Leu Thr Ile Pro Leu Leu Gly 310 315 Trp Leu Ser Asp Lys Val Gly Arg Arg Leu Pro Tyr Ile Leu Leu Asn 330 325 Ile Ser Ala Ile Ile Leu Ala Tyr Pro Met Leu Ser Ile Ile Val Asp 345 Lys Ser Tyr Ala Pro Gly Val Ile Met Leu Ser Ile Ile Val Ile His 360 365 Asn Phe Ala Val Leu Gly Leu Phe Ala Leu Glu Asn Ile Thr Met Ala

375

5678 Glu Met Phe Gly Ser Arg Asn Arg Phe Thr Arg Met Ala Ile Ser Lys 390 395 Glu Ala Gly Gly Leu Val Ala Val Gly Phe Gly Pro Val Leu Ala Gly 405 410 Ile Phe Cys Asn Met Thr Gly Ser Trp Trp Pro Ile Val Ala Met Leu 420 425 430 Val Ala Tyr Ser Leu Ile Gly Leu Val Ser Ala Leu Leu Met Pro Glu 440 435 Val Arg Asp Arg Asp Leu Ser Glu Ala Glu Asp Ala Ala Glu Ala Pro 455 His Lys Glu Ala Val Ala Tyr Gly Ala Leu Ser Ser Arg Arg 470 <210> 10197 <211> 492 <212> PRT <213> Enterobacter cloacae <400> 10197 Arg Val Ser Ile Met Glu Asn Gln Leu Leu Gln Ala Lys Ala Thr Arg 1.0 Pro Gln Tyr Asp Arg Asp Ser Leu Lys Ala Arg Ile Val His Leu Gly 20 25 Phe Gly Ala Phe His Arg Ala His Gln Ala Val Tyr Thr Asp Ile Leu 35 40 Ala Ala Glu Gln Gly Ser Asp Trp Gly Tyr Cys Glu Val Asn Leu Ile 55 Gly Glu Gln Gln Ile Ala Asp Leu Lys Ala Gln Asp Asn Leu Tyr 70 75 Thr Val Ala Glu Met Ser Ala Asp Ala Trp Thr Ala Arg Val Val Gly 90 Val Val Lys Asn Ala Leu His Ala Gln Val Asp Gly Leu Glu Thr Val 100 105 110 Leu Ala Ala Leu Cys Glu Pro Gln Val Ala Ile Val Ser Leu Thr Ile 120 Thr Glu Lys Gly Tyr Cys His Ser Pro Ala Thr Gly Gln Leu Met Phe 135 140 Asp His Pro Leu Ile Val Ala Asp Leu Gln Asn Pro His Gln Pro Lys 150 155 Ser Ala Pro Gly Val Val Val Glu Ala Leu Ala Arg Arg Lys Ala Ala

165 170 Gly Leu Pro Ala Phe Ser Val Met Ser Cys Asp Asn Met Pro Glu Asn 180 185 Gly His Val Met Arg Asn Val Thr Cys Ala Tyr Ala Arg Ala Val Asp 200 205 Gly Glu Leu Ala Asp Trp Ile Glu Ala Asn Val Thr Phe Pro Ser Thr 215 Met Val Asp Arg Ile Val Pro Ala Val Thr Ala Asp Thr Leu Asp Lys 230 235 Ile Glu Gln Leu Thr Gly Val Arg Asp Pro Ala Gly Val Ala Cys Glu 250 Pro Phe Arg Gln Trp Val Val Glu Asp Asn Phe Val Ala Gly Arg Pro 265 270 Lys Trp Glu Lys Ala Gly Ala Glu Leu Val Ser Asp Val Ile Pro Phe 275 280 285

Glu Glu Met Lys Leu Arg Met Leu Asn Gly Ser His Ser Phe Leu Ala

Tyr Leu Gly Tyr Leu Ala Gly Tyr Gln His Ile Asn Asp Cys Met Glu

Asp Glu His Tyr Arg Ala Ala Ala His Ala Leu Met Leu Lys Glu Gln

300

315

330

295

310

```
Ala Pro Thr Leu Lys Val Lys Gly Val Asp Leu Ala His Tyr Ala Asp
            340
                                345
Leu Leu Ile Ala Arg Tyr Ser Asn Pro Thr Leu Arg His Arg Thr Trp
                            360
                                                365
Gln Ile Ala Met Asp Gly Ser Gln Lys Leu Pro Gln Arg Met Leu Asp
                        375
                                            380
Ser Val Arg Trp His Leu Val His Gln Lys Pro Phe Pro Leu Leu Ala
                    390
                                        395
Leu Gly Val Ala Gly Trp Met Arg Tyr Val Gly Gly Val Asp Glu Gln
                                    410
Gly Asn Pro Ile Glu Val Ser Asp Pro Gln Leu Ala Val Ile Gln Ala
            420
                                425
Ala Val Asn Gly Ser Ala Glu Gly Glu Ser Arg Val Asn Ala Leu Leu
                            440
Gly Ile Glu Ala Ile Phe Gly Asn Glu Leu Pro Lys Asp Ala Val Phe
                        455
                                            460
Val Ala Ser Val Met Gln Ala Tyr Gln Thr Leu Leu Gln Lys Gly Ala
                                        475
                    470
Lys Ala Thr Val Ala Glu Tyr Ala Thr Arg Leu
                485
```

<210> 10198 -

<211> 716

<212> PRT

<213> Enterobacter cloacae

<400> 10198 Ala Ala Ile Pro Pro Val Thr Thr Ile Ala Ser Glu Ala Glu Glu Pro 10 Pro Val His Asn Asp Lys His Tyr Pro Phe Ile Lys Val Ser Met Thr 20 Ala Leu Ala Leu Leu Val Ala Pro Leu Ala Leu Gln Ala Gln Asp Lys Ala Thr Glu Ala Ser Gln Gly Thr Gln Glu Ser Leu Asn Ile Asp Ala 55 Ala Asp Gln Gln Ala Pro Gly Thr Thr Lys Thr Thr Asp Asp Ala Ser Thr Gly Ser Gly Asp Gly Lys Asn Val Ala Ser Ala Ser Gln Pro Ala 85 90 Thr Pro Leu Val Pro Gly Thr Pro Thr Trp Asp Ser Phe His Gly Gln 105 Leu Asn Ala Gln Lys Tyr Ser Pro Leu Thr Gln Ile Thr Ala Asp Asn 120 Val Gly Lys Leu Thr Lys Val Trp Glu Phe His Thr Gly Asp Val Ser 135 Asp Gly Lys Gly Asp Thr Pro Ala Thr Val Trp Ser Ala Thr Pro Ile 150 155 Phe Ala Asn Asp Thr Leu Tyr Ile Gly Thr Pro Phe Asp Arg Leu Ile 165 170 Ala Leu Asp Pro Gly Thr Gly Lys Glu Lys Trp His Tyr Asp Thr Lys 185 180 Ser Ser Arg Lys Ala Leu Thr Gln Pro Val Leu Lys Asn Arg Gly Val 200 195 205 Ser Tyr Trp Gln Ala Lys Asn Pro Val Ser Gly Glu Ala Cys Gln Lys 215 220 Met Val Tyr Met Gly Thr Val Asp Gly Lys Leu Phe Ala Leu Asp Ala 230 235 Asp Ser Gly Lys Pro Cys Ser Gly Phe Ala Asn Asn Gly Val Leu Asp 245 250 Leu Asn Gln Trp Asn Thr Val Asn Ala Lys Tyr Pro Leu Ser Val Leu 265

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Gln Pro Pro Thr Val Val Gly Asn His Leu Leu Val Gly Trp Ala Gly
                            280
Lys Asp Trp Ala Tyr Ala Glu Ala Pro Pro Gly Thr Val Phe Ser Val
                       295
                                            300
Asn Ala Gln Thr Gly Lys Leu Glu Trp Thr Phe Glu Ala Ile Pro Ala
                    310
                                        315
Glu Ile Arg Lys Arg Thr Gly Thr Ala Asn Val Trp Thr His Met Ser
               325
                                    330
Ala Asp Glu Ala Asn Gly Leu Val Tyr Leu Pro Val Ser Ser Pro Ser
                                345
Pro Asn Tyr Trp Gly Gly Asn Arg Val Asp Ala Ile Pro Leu Gly Thr
                            360
Ser Thr Thr Ala Leu Asp Ile Asn Thr Gly Lys Val Val Trp Ser Arg
                        375
                                            380
Gln Trp Val His His Asp Val Trp Asp Tyr Asp Ile Asn Ser Ala Pro
                    390
                                        395
Thr Leu Met Asp Ile Thr Val Asp Gly Lys Gln Ile Pro Ala Leu Ile
               405
                                    410
Gln Ala Thr Lys Gln Gly Phe Leu Phe Val Val Asn Arg Leu Thr Gly
                                425
           .420
Glu Asp Val Trp Pro Ile Glu Glu Arg Pro Val Pro Gln Gly Asp Gly
                            440
Ser Val Gln Gly Glu Val Leu Ser Pro Thr Gln Pro Phe Pro Thr Lys
   450
                        455
                                            460
Pro Ala Pro Leu Leu Asp Gln Ser Lys Lys Pro Glu Ile Trp Lys Leu
                    470
                                        475
Ala Asp Ile Val Gly Gly Gln Cys Ser Arg Leu Trp Asp Asn Leu
               485
                                    490
Thr Tyr Glu Gly Met Tyr Thr Pro Pro Thr Thr Lys Gly Glu Gly Thr
            500
                                505
Leu Thr Tyr Pro Asp Ser Ala Gly Gly Val Gln Trp Gly Gly Val Ala
                            520
                                                525
Phe Asp Pro Gln Lys Gln Ile Ala Ile Val Asn Thr Ser His Ile Val
                        535
                                            540
Gln Tyr Val Lys Leu Tyr Ser Arg Glu Asp Tyr Asp Asn Ala Asp Lys
                    550
                                        555
Asp Ser Gly Asn Glu Ser Gly Phe Ala Pro Gln Glu Gly Ala Pro Tyr
                                    570
Gly Met Arg Leu Leu Val Ala Ser Asn Trp Leu Gly Met Pro Cys Trp
                                585
Gln Pro Pro Phe Gly Glu Ile Val Ala Leu Asp Met His Thr Gly Asp
                            600
Val Lys Trp Arg Arg Pro Val Gly Ala Ser Gln Gln Tyr Gly Phe Phe
                        615
Met Pro Glu Ser Trp Gly Ser Pro Thr Ile Gly Gly Pro Ala Val Thr
                    630
                                        635
Ala Gly Gly Val Ile Phe Ile Gly Ala Ser Met Asp Ala Lys Val Arg
               645
                                    650
Ala Tyr Ser Val Glu Ser Gly Glu Glu Leu Trp Ser Asp Gln Ala Glu
                                665
Ala Pro Ala Val Ala Asn Pro Ser Val Tyr Glu Tyr Lys Gly Arg Gln
                            680
                                                685
Tyr Val Ala Phe Val Ala Gly Gly Asn Thr Ile Leu Lys Asp Gln Val
                       695
                                            700
Gly Asp Gln Val Val Tyr Ala Leu Pro Glu
                   710
```

<sup>&</sup>lt;210> 10199

<sup>&</sup>lt;211> 67

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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<400> 10199
Gly Thr Thr Met Lys Lys Arg Ala Gly Val Leu Thr Val Ala Val Val
                                    10
Ala Leu Leu Ser Gly Cys Thr Pro Arg Ile Glu Val Ala Ala Pro Lys
            20
                                25
Glu Pro Ile Thr Ile Asn Met Asn Val Lys Ile Glu His Glu Ile His
                            40
Ile Lys Val Asp Lys Asp Val Glu Ala Leu Leu Lys Ser Arg Ser Asp
Leu Phe
65
<210> 10200
<211> 198
<212> PRT
<213> Enterobacter cloacae
<400> 10200
Glu Gly Ala Thr Tyr Arg Thr Pro Arg Ala Asp Ala Gly Arg Asp Ala
                                    10
Val Ser Pro Ala Arg Leu Pro Arg Pro Ala Val Lys Glu Asp Ala
            20
                                25
Met Gln Arg Leu Val Asp Ile Ala Pro Ala Gln Ile Pro Gln Ile Trp
Ala Leu Leu Ser Gln Ile Pro Asp Pro Glu Val Pro Val Leu Thr Ile
Thr Asp Leu Gly Met Val Arg Ser Val Lys Ala Gln Gly Glu Gly Trp
                    70
Val Ile Gly Phe Thr Pro Thr Tyr Ser Gly Cys Pro Ala Thr Glu His
                                    90
Leu Leu Gly Ala Ile Arg Glu Thr Leu Thr Gly Asn Gly Phe Ser Pro
            100
                                105
Val His Ile Val Leu Gln Leu Glu Pro Ala Trp Thr Thr Asp Trp Met
                            120
Thr Asp Asp Ala Arg Arg Arg Leu Arg Glu Tyr Gly Ile Ser Pro Pro
                        135
                                            140
Val Gly His Ser Cys His Ala His Val Pro Ala Glu Val Ser Cys Pro
                    150
                                        155
Arg Cys Ala Ser Thr Asp Thr Ser Leu Ile Ser Glu Phe Gly Ser Thr
                                    170
Ala Cys Lys Ala Leu Tyr Arg Cys Asn Thr Cys Arg Glu Pro Phe Asp
                                185
Tyr Phe Lys Cys Ile
        195
<210> 10201
<211> 261
<212> PRT
<213> Enterobacter cloacae
<400> 10201
Cys Glu Gly Asp Gly Met Ser Glu Leu Ile Val Thr Arg His Gly Arg
                                    10
Val Leu Gln Leu Thr Leu Asn Arg Pro Ala Ala Arg Asn Ala Leu Asn
                                25
Asn Ala Leu Leu Gln Ile Ala Glu Gln Leu Glu Ala Ala Ala Ala
                            40
                                                45
Asp Ala Glu Ile Ala Val Cys Val Met Tyr Gly Asn Glu Arg Cys Phe
                        55
Ala Ala Gly Ala Asp Leu Asn Glu Met Ala Glu Lys Asp Leu Pro Ala
```

```
70
                                        75
Thr Leu Asn Asp Ile Arg Pro Gln Leu Trp Ala Arg Ile Asn Ala Phe
               85
                                    90
Thr Lys Pro Leu Ile Ala Ala Val Asn Gly Phe Ala Leu Gly Ala Gly
            100
                                105
                                                    110
Cys Glu Leu Ala Leu Leu Cys Asp Val Val Ile Ala Gly Asp Asn Ala
                            120
                                                125
Arg Phe Gly Leu Pro Glu Ile Thr Ile Gly Ile Met Pro Gly Ala Gly
                        135
Gly Thr Gln Arg Leu Ile Arg Ser Val Gly Lys Ser Leu Ala Ser Lys
                   150
                                        155
Met Val Leu Thr Gly Glu Ser Ile Thr Ala Val Gln Ala His Ser Ala
                165
                                    170
Gly Leu Val Ser Asp Val Tyr Pro Ala Ser Leu Thr Leu Glu Tyr Ala
            180
                                185
Leu Lys Gln Ala Ala Leu Met Ala Arg His Ser Pro Leu Ala Leu Gln
                            200
                                                205
Ala Ala Lys Gln Ala Leu Arg Gln Ser Gln Glu Val Pro Leu Gln Ala
                        215
                                            220
Gly Leu Ala Gln Glu Arg Gln Leu Phe Ala Leu Leu Ala Ala Thr Asp
                    230
                                        235
Asp Arg Arg Glu Gly Ile Asn Ala Phe Leu Gln Lys Arg Thr Pro Asp
                245
                                    250
Phe Lys Gly Arg
            260
<210> 10202
<211> 527
<212> PRT
<213> Enterobacter cloacae
<400> 10202
Ser Ser Arg Arg Ser Thr Pro Pro Lys Pro Thr Pro Ser Thr Pro Ser
                                    10
Leu Ile Trp Ser Ala Thr Ile Asn Ala Trp Pro Asp Ala Ala Thr Thr
            20
                                25
Thr Gly Lys Ala Ser Ala Arg Ser Trp Gln Asn Ala Arg Arg Thr Leu
        35
                            40
Arg Gly Asn Asn Met Val Asn Ile His Thr Val Ala Val Ile Gly Ser
                        55
                                            60
Gly Thr Met Gly Ala Gly Ile Ala Glu Val Ala Ala Ser His Gly His
                    70
                                        75
Pro Val Leu Val Tyr Asp Ile Asp Ala Ala Ile Ser Arg Ala Val
                                    90
Asp Gly Ile Arg Gln Arg Leu Ser Ser Arg Val Ala Arg Gly Lys Leu
                                105
Ser Ala Asp Ala Gly Glu Gln Ile Leu Ala Arg Leu Thr Pro Val Thr
                            120
Asn Ile Ser Ala Leu Ala Lys Ala Asp Leu Val Ile Glu Ala Ala Ser
                        135
                                            140
Glu Arg Leu Glu Val Lys Lys Ala Leu Phe Thr Gln Leu Ala Glu Val
                    150
                                        155
Cys Pro Pro Gln Thr Leu Leu Ala Ser Asn Thr Ser Ser Ile Ser Val
                165
                                    170
Thr Ala Ile Ala Ala Glu Ile Asn His Pro Glu Arg Val Ala Gly Leu
            180
                                185
                                                    190
His Phe Phe Asn Pro Ala Pro Val Met Lys Leu Val Glu Val Val Ser
                            200
Gly Leu Ala Thr Ser Pro Glu Val Ala Asp Ala Leu Cys Glu Leu Ala
                        215
                                            220
```

Leu Ser Trp Gly Lys Gln Pro Val Arg Cys Gln Ser Thr Pro Gly Phe

230 235 Ile Val Asn Arg Val Ala Arg Pro Phe Tyr Ser Glu Ala Trp Arg Ala 245 250 Leu Glu Glu Gln Val Ala Thr Pro Glu Val Ile Asp Ala Ala Leu Arg 260 265 Asp Gly Gly Phe Pro Met Gly Pro Leu Glu Leu Thr Asp Met Ile 280 Gly Gln Asp Val Asn Phe Ala Val Thr Cys Ser Val Phe Asn Ala Phe 295 Trp Gln Glu Arg Arg Phe Leu Pro Ser Leu Val Gln Gln Glu Leu Val 310 315 Leu Ala Gly Arg Leu Gly Lys Lys Ser Gly Gln Gly Val Tyr Arg Trp 325 330 Leu Glu Asp Lys Pro Ala Val Arg Trp Leu Ala Pro Val Ser Asp Ser 340 345 Phe Asn Pro Met Arg Val Gln Arg Arg Ser Asp Gly Val Thr Glu Ile 360 Asp Asp Leu Leu Ile Glu Thr Gln Gly Glu Thr Ala Gln Ser Leu 370 375 380 Ala Leu Arg His Gly Cys Pro Val Val Val Asp Arg Ile Glu Arg 390 395 Asp Val Ala Val Ile Ala Ala Ala Pro Gly Asn Pro His Ala Ala Thr 405 410 Gln Lys Ala Ile Tyr Cys Leu Gln His Gln Gln Lys Arg Val Val Gln 425 430 420 Ile Ala Asp Tyr Pro Gly Leu Leu Val Trp Arg Thr Val Ala Met Ile 440 435 Ala Asn Glu Ala Leu Asp Ala Leu Gln Lys Gly Val Ala Ser Glu Gln 455 450 460 Asp Ile Asp Thr Ala Met Arg Leu Gly Val Asn Tyr Pro Cys Gly Pro 470 475 Ile Ala Trp Gly Glu Arg Leu Gly Trp Gln Arg Leu Leu Thr Leu Leu 485 490 Glu Asn Leu Gln Arg His Tyr Gly Glu Glu Arg Tyr Arg Pro Cys Ser 500 505 510 Leu Leu Arg Gln Arg Ala Leu Leu Glu Ser Ser Tyr Glu Ser 515 520

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<210> 10203
```

## <400> 10203

Asn Ser Glu Pro Thr Thr Glu Asn Arg Arg Ser Phe Ser Arg Glu Ile Ala Pro His Arg Arg Gln Tyr Asp Arg Arg Ser Leu Met Arg Asp Ala Phe Ile Cys Glu Gly Val Arg Thr Pro Val Gly Arg Tyr Gly Gly Gly Leu Ser Ser Val Arg Ala Asp Asp Leu Gly Ala Val Pro Leu Arg Ala 55 Leu Leu Ala Arg Tyr Pro Gln Leu Asp Leu Glu Arg Ile Asp Asp Val 70 75 Ile Phe Gly Cys Ala Asn Gln Ala Gly Glu Asp Asn Arg Asn Val Ala 90 85 Arg Met Ser Ser Leu Leu Ala Gly Leu Pro Gln Thr Val Ser Gly Thr 105 Thr Ile Asn Arg Leu Cys Gly Ser Gly Leu Asp Ala Leu Gly Phe Ala 120 Ala Arg Ala Ile Lys Ala Gly Asp Gly Asp Leu Leu Ile Ala Gly Gly

<sup>&</sup>lt;211> 430

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
135
    130
                                            140
Val Glu Ser Met Ser Arg Ala Pro Phe Val Met Gly Lys Ala Thr Ala
                   150
                                     155
Ala Phe Gln Arg Gln Ala Glu Ile Phe Asp Thr Thr Ile Gly Trp Arg
                                   170
               165
Phe Val Asn Pro Leu Met His Gln Gln Tyr Gly Thr Asp Ser Met Pro
                               185
           180
Glu Thr Ala Glu Asn Val Ala Glu Leu Leu Asn Ile Ser Arg Ala Asp
                           200
                                               205
Gln Asp Ala Phe Ala Leu Arg Ser Gln Gln Arg Thr Ala Arg Ala Gln
                        215
                                            220
Gln Asn Gly Val Leu Ala Gln Glu Ile Ile Pro Val Gln Val Ala Gly
                    230
                                        235
Lys Lys Gly Ala Val Thr Glu Val Ser Val Asp Glu His Pro Arg Ala
                                    250
Glu Thr Thr Leu Glu Gln Leu Ala Ala Leu Lys Ala Pro Phe Arg Lys
                                265
Asn Gly Val Val Thr Ala Gly Asn Ala Ser Gly Val Asn Asp Gly Ala
                            280
Ala Ala Leu Ile Ile Ala Ser Glu Pro Met Ala Leu Ala Gln Gly Leu
                        295
                                            300
Thr Pro Arg Thr Arg Ile Val Ala Met Ala Thr Ala Gly Val Glu Pro
                    310
                                        315
Arg Leu Met Gly Leu Gly Pro Val Pro Ala Thr Arg Lys Val Leu Glu
                325
                                    330
Arg Ala Gly Leu Ser Ile Thr Asp Met Asp Val Ile Glu Leu Asn Glu
            340
                                345
Ala Phe Ala Ala Gln Ala Leu Gly Val Leu Arg Gln Leu Gly Leu Pro
                            360
Asp Asp Ala Glu His Val Asn Pro Asn Gly Gly Ala Ile Ala Leu Gly
                        375
                                            380
His Pro Leu Gly Met Ser Gly Ala Arg Leu Ala Leu Ala Ser Asn
                    390
                                        395
Glu Leu His Arg Arg Gly Gly Arg Tyr Ala Leu Cys Thr Met Cys Ile
                405
                                    410
                                                        415
Gly Val Gly Gln Gly Ile Ala Met Ile Leu Glu Arg Val
            420
                                425
                                                    430
<210> 10204
<211> 662
<212> PRT
<213> Enterobacter cloacae
<400> 10204
Gly His Ser Met Lys Leu Thr Leu Ile Ala Lys His Leu Ala Leu Ala
Gly Val Leu Thr Ser Leu Ser Leu Ser Ser Phe Ala Glu Val Gln Pro
Gln Asp Ala Thr Ala Thr Thr Arg Gln Val Asn Asn Ala Leu Tyr Asn
                            40
Lys Leu Pro Phe Ala Asp Lys Thr Asp Phe Glu Asn Ala His Lys Gly
                        55
Phe Ile Ala Pro Leu Pro Gln Asn Met Ile Lys Gly Glu Gln Gly Asn
                    70
                                        75
```

Val Ile Trp Asn Pro Ala Lys Tyr Asp Phe Val Lys Glu Gly Glu Lys

Ala Pro Asp Thr Val Asn Pro Ser Leu Trp Arg Gln Ser Gln Leu Ile 105

Asn Ile Gly Gly Leu Phe Lys Leu Thr Asp Gly Val Tyr Gln Ile Arg 120

Asn Leu Asp Leu Ser Asn Met Thr Ile Ile Glu Gly Glu Lys Gly Ile

90

110

125

Thr Val Ile Asp Pro Leu Leu Ser Ala Glu Pro Ala Lys Glu Ala Leu Asp Leu Tyr Tyr Ala Asn Arg Gly Lys Lys Pro Val Val Ala Val Val Ile Thr His Ser His Val Asp His Tyr Gly Gly Leu Arg Gly Val Val Asp Glu Ala Asp Val Lys Ser Gly Lys Val Lys Ile Tyr Ala Pro Asp Gly Phe Met Lys Glu Ala Val Ser Glu Asn Ile Met Ala Gly Asn Ala Met Ser'Arg Arg Ala Arg Tyr Met Tyr Gly Asn Leu Leu Lys Pro Asp Ala Lys Gly Gln Val Gly Ala Gly Leu Gly Thr Thr Ser Ala Gly Thr Val Thr Leu Ile Pro Pro Thr Asp Tyr Ile Thr His Thr Gly Gln Glu Glu Val Ile Asp Gly Leu Thr Tyr Asp Phe Met Met Ala Pro Gly Ser Glu Ala Pro Ser Glu Met Leu Trp Tyr Val Lys Glu Lys Lys Met Ile Glu Ala Ala Glu Asp Val Thr His Thr Leu His Asn Thr Tyr Ser Leu Arg Gly Ala Lys Ile Arg Asp Pro Leu Ala Trp Ser Lys Tyr Ile Asn Ala Ala Ile Glu Arg Trp Gly Ala Asp Ala Glu Val Ile Ile Ala Gln His His Trp Pro Thr Trp Gly Asn Glu Asn Ile Val Lys Leu Met Lys Gly Gln Arg Asp Met Tyr Arg Tyr Ile Asn Asp Gln Thr Leu Arg Met Ala Asn Lys Gly Leu Thr Arg Asp Glu Ile Ala Ala Glu Phe Lys Leu Pro Glu Ser Leu Glu Lys Gln Trp Ala Ser Arg Gly Tyr Tyr Gly Ser Val Ser His Asp Val Lys Ala Thr Tyr Val Phe Tyr Leu Gly Trp Phe Asp Gly Asn Pro Ala Thr Leu Asp Glu Leu Pro Pro Glu Leu Ala Glu Lys Lys Phe Val Gln Tyr Met Gly Gly Ala Asp Ala Ile Met Gln Lys Ala Lys Ala Asp Tyr Gln Gln Gly Asn Tyr Arg Trp Val Ala Gln Val Val Ser Lys Val Val Phe Ala Asp Pro Asn Asn Gln Ala Ala Arg Asn Leu Glu Ala Asp Ala Leu Glu Gln Leu Gly Tyr Gln Ala Glu Ala Gly Thr Trp Arg Asn Phe Tyr Leu Thr Gly Ala Gln Glu Leu Arg Asn Gly Val Lys Lys Leu Pro Thr Pro Asn Thr Ala Ser Pro Asp Thr Val Arg Ala Met Thr Pro Glu Met Phe Phe Asp Tyr Leu Gly Val His Ile Asn Gly Val Arg Ala Gly Asn Ala Lys Ala Val Phe Asn Val Asp Leu Gly Lys Asp Gly Gly Lys Tyr Lys Leu Glu Leu Glu Asn Gly Val Leu Asn His Thr Ala Asn Ala Gln Ala Lys Asp Ala Asp Ala Thr Ile Thr Leu Asp Arg Thr Thr Leu Asn Asn Ile Ile Leu Lys Lys Glu Thr Leu 

Lys Gln Ala Met Asp Lys Gly Asp Val Lys Val Ser Gly Asn Gly Ala 630 635 Lys Leu Glu Glu Met Leu Ser Tyr Met Asp Thr Phe Asp Phe Trp Phe 645 650 Asn Ile Val Thr Pro 660 <210> 10205 <211> 316 <212> PRT <213> Enterobacter cloacae <400> 10205 Cys Ala Val Ala Ala Gly Arg Ser Leu Cys Gly His Leu Asp Asp Ala Leu Val Ala Pro Ala Tyr Cys Pro Gly Cys Ser Ala Thr Ala Ala Gly 25 Leu Leu Arg Gly Arg His Ala Arg Arg Ser His Cys Ser Pro Ala Gly Leu Leu Arg Cys Arg Arg Asp Asp Leu Arg Thr Ser Pro Asp Thr Arg 55 Leu Gly Arg Thr Arg Arg Glu Ala Glu Ser Glu Ile Met Lys Thr Val 70 7.5 Leu Ile Thr Gly Ala Ser Ser Gly Ile Gly Ala Gly Leu Ala Lys Ser 90 Phe Ala Asp Asp Gly Tyr Arg Val Ile Ala Cys Gly Arg Asp Ala Gln 100 105 Arg Leu Ala Ala Val His Gln His Ser Pro Asn Ile Thr Val Arg Leu 120 Phe Asp Met Thr Asp Arg Asp Ala Cys Arg Gln Ala Leu Ala Asp Cys 135 140 Ala Ala Asp Thr Val Ile Leu Cys Ala Gly Thr Cys Glu Tyr Leu Asp 150 155 Arg Gly Glu Val Asp Ala Glu Leu Val Ala Arg Val Met Thr Thr Asn 165 170 Phe Met Gly Pro Val Asn Cys Leu Ala Ala Leu Gln Pro Gln Leu Val 180 185 190 Ser Gly Asn Arg Val Val Leu Val Ser Ser Met Ala His Trp Leu His 200 205 Phe Pro Arg Ala Glu Ala Tyr Gly Ala Ser Lys Ala Ala Leu Thr Trp 215 220 Phe Ala Asp Thr Leu Arg Leu Asp Trp Glu Pro Lys Gly Ile Ala Val 230 235 Thr Val Val Ser Pro Gly Phe Val Asp Thr Pro Leu Thr Arg Lys Asn 250 Asp Phe Pro Met Pro Gly Arg Val Ser Val Gly Asp Ala Val His Ala Ile Arg Arg Gly Leu Ala Lys Gly Lys Asp His Ile Ala Phe Pro Ala 280 Gly Phe Ser Leu Ala Leu Arg Leu Leu Ser Gly Leu Pro Asp Val Leu 295 Gln Arg Ala Leu Leu Arg Arg Met Val Arg Pro 310 <210> 10206 <211> 251 <212> PRT <213> Enterobacter cloacae

<400> 10206

Thr Leu Ser Arg Pro Gly Arg Ala Thr Glu Met Asn Ser Cys Leu Tyr

```
10
His Gly Thr Leu Arg His Arg Arg Leu Ala Pro Lys Ala His His Phe
                                25
Thr Tyr Ser Val Phe Met Ala Trp Leu Asp Leu Asp Glu Leu Asp Ala
                            40
Leu Pro Ser Val Gly Val Arg Arg Asn Arg Val Ala Pro Ala Ala Phe
                        55
Tyr Asp Ala Asp Tyr Pro Leu Gly Thr Pro Leu Lys Glu His Val Leu
                   70
                                        75
Glu Arg Leu Glu Asn Leu Thr Gly Glu Arg Pro Ala Gly Arg Val Met
               85
                                    90
Leu Leu Thr Gln Leu Arg Tyr Phe Gly Phe His Phe Asn Pro Val Asn
           100
                                105
Phe Tyr Tyr Cys Tyr Asp Gly Glu Asp Thr Leu Arg Trp Val Leu Ala
                            120
Glu Val Arg Asn Thr Pro Trp Asn Glu Arg His Tyr Tyr Ala Val Ala
                        135
Gly Arg Asp Ala Pro Pro Thr Gln Lys Ala Phe His Val Ser Pro Phe
                   150
                                        155
Asn Pro Met Asp Met Val Tyr His Trp Arg Phe Asn Ser Pro Asp Ser
               165
                                    170
Thr Leu Arg Met His Ile Glu Asn His Gln Glu Thr Lys Val Phe Asp
                                185
           180
Ala Thr Leu Thr Leu Arg Arg Ala Pro Leu Thr Arg Ala Ala Leu Arg
                            200
Ser Leu Leu Ala Arg Ile Pro Leu Met Thr Leu Lys Thr Val Phe Ala
                        215
                                            220
Ile Tyr Trp Gln Ala Leu Arg Leu Trp Leu Lys Arg Val Pro Leu His
                    230
                                        235
Asn His Pro Leu Ser Arg Ser Glu Arg Ser
                245
```

<210> 10207

<211> 321

<212> PRT

<213> Enterobacter cloacae

## <400> 10207

Ser Leu Leu Asp Ala Gly Gly Ala Val Ser Arg Ala Gly Ala Gly His Leu Asp Arg Ala Gly Gly Ala Cys Leu Ala Val Ile Thr Ala Ile Thr 20 . Pro Gly Ile Arg Pro Cys Ala Gly Gly Val Gly Cys Ala Ala Gly Arg Pro Leu Gly Ala Asp Gly Ala Asp Cys Val His Arg Arg Val Pro Asp Ala Ala Met Asp Gly Gly Ala Val Ala Asn Val Cys His Arg Leu Asp Ala Pro Asp Pro His Asp His Leu Ala Arg Met Val Ala Asp Gly Ala Gly Asp Ser Gly Arg Thr Gly Ser Leu Pro Asp Arg Ala Ser Trp 105 Gly His Tyr Val Ser Gly Ala Asp Leu Tyr Arg Arg Gln Leu Asp Val 115 120 125 Pro Arg Leu Ala Gly Ala Asp Ala Val Phe Pro Pro Val Asp Gly Glu 135 140 Thr Thr Met Arg Asn Leu Val Leu Met Leu Ala Leu Ser Val Phe Thr 150 155 Cys Thr Val Gln Ala Ala Asp Trp Leu Ser Trp Arg Lys Val Gly Asp 170 Ala Thr Leu Thr Trp Gly Pro Phe Ile Val Tyr Thr Ser Gln Leu Leu

5688 180 185 190 Thr Pro Asp Gly Ser Tyr Thr Gly Leu Asp Gly Asp Asn Ala Leu Ile 200 205 195 Ile Thr Tyr Ala Arg Asp Ile Asp Gly Asp Asp Leu Val Glu Ala Thr 215 220 Arg Asp Gln Trp Gln Ala Gln Gly Ile Leu Gln Gln Glu Pro Gln Ser 230 235 Glu Ala Trp Leu Arg Met Leu Ser Thr Leu Trp Pro Asp Val Thr Pro 245 250 Gly Thr Gln Leu Ala Phe Val Val Asn Asn Gly Gln Gly Gln Phe Trp 265 Tyr Arg Pro Thr Ala Ser Gln Lys Lys Phe Thr Pro Leu Gly Pro Arg 280 Gln Thr Ala Ala Phe Ser Ser Arg Phe Leu Ala Ile Trp Leu Asp Pro 295 Arg Thr Glu Tyr Pro Glu Leu Arg Gln Gln Leu Thr Gly Gly Ala Gln 310 315 <210> 10208 <211> 182 <212> PRT <213> Enterobacter cloacae <400> 10208 Thr Asn Met Thr Lys Leu Thr Leu Gln Glu Gln Met Leu Lys Ala Gly 10

Leu Val Ser Ser Lys Lys Met Ala Lys Val Gln Arg Thr Ala Lys Lys 25 20 Ser Arg Val Gln Ala Arg Glu Ala Arg Glu Ala Val Glu Glu Asn Lys 40 Lys Ala Gln Leu Glu Arg Asp Lys Gln Leu Ser Glu Gln Gln Lys Gln 5.5 60 Ala Val Leu Ala Lys Glu Phe Arg Ala Gln Val Lys Gln Leu Ile Glu 70 75 Met Asn Arg Ile Thr Val Ala Lys Gly Asn Ile Thr Phe Asn Phe Thr 85 90 Asp Gly Asn Leu Ile Lys Lys Ile Glu Val Asp Lys Gln Thr Gln Thr 105 110 Gln Leu Ile Asn Gly Arg Leu Ala Ile Ala Arg Leu Val Ile Asn Ala 120 Lys Gly Asp Cys Asp Tyr Ala Ile Ile Pro Ala Val Ala Asp Lys 135 140 Ile Ala Gln Arg Asp Ala Asp Ser Ile Val Leu Asn Ser Ala Leu Ser 150 155 Gln Glu Glu Gln Asp Glu Asp Asp Pro Tyr Ala Asp Phe Lys Ile Pro 170 165 Asp Asp Leu Met Trp

<210> 10209 <211> 282 <212> PRT <213> Enterobacter cloacae

```
Ala Val Asn Thr Val Gly Ala Trp Leu Ala Gln Asp Asp Tyr Gln Asp
                            40
Asn Gln Pro Val Asp Leu Val Ile Leu Ala Gly Asn Ala Val Val Pro
                        55
Ala Ile Asp Ala Ala Cys Lys Asn Ala Ala Glu Gln Gly Val Pro Leu
                    70
                                        75
Ile Ile Ser Gly Gly Ile Gly His Ser Thr Thr Phe Leu Tyr Ala Ala
                85
                                    90
Ile Ala Lys His Pro Arg Tyr Asn Arg Ile Pro Thr Thr Gly Arg Ala
                                105
Glu Ala Ala Ile Leu Ala Asp Ile Ala Arg Glu Phe Trp Asn Ile Pro
                            120
Ala Glu His Leu His Val Glu Asp Gln Ser Thr Asn Cys Gly Glu Asn
                        135
                                            140
Ala Arg Phe Ser Arg Ala Leu Met Lys Gln Ser Gly Leu Asn Ala Ala
                    150
                                        155
Arg Val Leu Val Val Gln Asp Pro Thr Met Gln Arg Arg Thr Met Ala
                                    170
                165
Thr Phe Ala Arg Val Cys Arg Asp Glu Ala Ala Ala Pro Ala Trp Val
            180
                                185
Ser His Pro Gly Leu Thr Pro Val Leu Gln Asn Ser Asp Asp Gly Leu
                            200
                                                205
Val Phe Ser Gly Pro Ala Glu Gly Leu Trp Pro Val Glu Arg Tyr Leu
                                            220
                        215
Ser Leu Val Leu Gly Glu Phe Pro Arg Leu Arg Asp Asp Ile Asn Gly
                    230
                                        235
Tyr Gly Pro Ala Gly Arg Asp Phe Ile Ala His Val Asp Ile Pro Ala
                                    250
                245
Asp Val Asp Ala Ala Trp Gln Ile Leu Arg Asn Asp Val Ile Leu Thr
            260
                                265
Asp Ala Leu Val Ser Arg Ser Leu Leu
       275
<210> 10210
<211> 328
<212> PRT
<213> Enterobacter cloacae
<400> 10210
Asn Met Ser His Arg Lys Trp Asp Gly Ala Ile Ala Met Arg Asn Leu
                                    10
Ala Leu Trp Tyr Arg Arg Phe Gly Glu Pro Glu Ser Val Leu Gln Ala
            20
Glu Thr Thr Pro Leu Ser Pro Arg Gln Pro Gly Glu Ile Arg Val Arg
Met Leu Phe Ser Pro Val Asn Ala Ser Asp Leu Ile Pro Ile Thr Gly
Ala Tyr Arg His Arg Thr Pro Leu Pro Ala Ile Ala Gly Tyr Glu Gly
Val Gly Ile Val Thr Glu Thr Pro Ala Ala Tyr Pro Ala Leu Leu Gly
```

```
Ala Glu Ala Val Tyr Gly Ile His Arg Ser Pro Val His Ala Gln Arg
            180
                                185
Leu Ala Glu Lys Gly Ile Val Pro Ile Ala Gln His Asp Met Ala Ala
                            200
                                                 205
Val Asn Ala Ala Ala Arg Ala Asp Val Val Tyr Asp Ala Thr Gly
                        215
                                             220
Gly Ser Leu Ala Glu Thr Ile Leu Ser Val Met Pro Glu Thr Gly Thr
                    230
                                        235
Phe Val Cys Tyr Gly Leu Leu Ser Gly Gln Thr Phe Arg Gln Gln Arg
                245
                                    250
Pro Leu Pro Arg Val Ala Trp Phe His Ile Arg Asn Tyr Leu Asp Ala
                                265
Leu Ser Ala Glu Ala Trp Gln Ala Glu Phe Arg Arg Ile Trp Pro Lys
                            280
Leu Arg Ala Ser Gln Cys Ser Asp Val Thr Leu Tyr Pro Leu Ser Glu
                        295
                                             300
Trp Gln Arg Ala Val Gly Asn Tyr Arg Glu Ala Gly Arg Thr Gly Lys
                    310
                                        315
Pro Met Leu Ser Met Asp Asn
                325
<210> 10211
<211> 144
<212> PRT
<213> Enterobacter cloacae
<400> 10211
Phe Pro Ile Phe Trp Phe Ala Val Arg Ser Glu Pro Arg Trp Ile Ile
                                    10
Phe Ser Ser Arg Arg Lys Asn Met Phe Tyr Trp Ile Leu Leu Ala Leu
            20
Ala Ile Val Ala Glu Ile Thr Gly Thr Leu Ser Met Lys Trp Ala Ser
                            40
                                                 45
Val Ser Asp Gly Ser Thr Gly Phe Ile Leu Met Leu Val Met Ile Thr
                        55
Leu Ser Tyr Ile Phe Leu Ser Phe Ala Val Lys Lys Ile Ala Leu Gly
                    70
                                        75
Val Ala Tyr Ala Leu Trp Glu Gly Val Gly Ile Leu Leu Ile Thr Leu
                                    90
Phe Ser Val Met Leu Phe Asp Glu Thr Leu Thr Thr Met Lys Ile Ala
            100
                                105
                                                     110
Gly Leu Thr Thr Leu Val Ala Gly Ile Val Leu Ile Lys Ser Gly Thr
                            120
Arg Lys Pro Ala Lys Gln Gln Lys Glu Gln Thr His Ala Ala Val
    130
                        135
<210> 10212
<211> 152
<212> PRT
<213> Enterobacter cloacae
<400> 10212
Met Phe Ser Phe Asp Ala Gly Val Arg Leu Gly Pro Asp Asp Cys Arg
                                    10
Ala His His Ala Arg Tyr Gly Asp Gly Cys Val Asp Ala Leu Ala His
                                25
Phe Arg Arg Tyr Gly Phe Thr Gln Thr Pro Ala Asp Leu Asp Ala His
                            40
                                                 45
Pro Cys Ile Ala Tyr Gln Phe Ala Asp Gly Asn His Tyr Gln Trp Glu
```

Leu Val Gln Asp Gly Lys Arg Val Thr His Arg Pro Glu Gly Gln Trp

```
70
                                        75
Ala Phe Ser Asp Ser Tyr Met Glu Ala Glu Ala Ala Arg Leu Gly Leu
               8.5
                                    90
Gly Leu Ala Tyr Val Pro Val Glu Leu Met Gly Asp Asp Pro Glu Arg
                               105
           100
Gly Thr Leu Ile Arg Val Leu Gln Arg Tyr Ser Leu Arg Met Asp Gly
                           120
                                                125
Leu Tyr Leu Tyr Tyr Pro His Arg Asn Val Ser Pro Ala Leu Arg Ala
                       135
Val Ile Asp Thr Leu Lys Ile
<210> 10213
<211> 153
<212> PRT
<213> Enterobacter cloacae
<400> 10213
Pro Phe Ile Gly Lys Gly Val Arg Leu Met Tyr Lys Lys Ile Leu Met
                                    10
Pro Val Asp Val Phe Glu Met Asp Leu Ser Asp Lys Ala Val Arg His
           20
                                25
Ala Val Asn Leu Ala Lys Ala Glu Gly Ala Thr Ile Thr Leu Val Asn
                            40
Ile Leu Pro Asn Ser Ser Arg Ser Leu Leu Arg Gly Phe Asn Ala Asp
                                            60
                        55
Ile Lys Lys Phe Glu Glu Tyr Met Thr Ala Glu Ser Asp Lys Lys Met
                    70
                                        75
Lys Ala Leu Lys Arg Leu Phe Asp Met Ser Pro Glu Asn Ile Asp Cys
                                    90
                85
Glu Val Arg Phe Gly Asn Val Arg Asp Glu Ile Ile Lys Leu Ser Lys
            100
                                105
Glu Gly Lys Tyr Asp Val Ile Val Ile Gly Ser Arg Asn Pro Ser Met
       115
                            120
                                                125
Thr Thr His Leu Leu Gly Ser Asn Ala Glu Thr Ile Leu Arg Tyr Ala
                        135
                                            140
Thr Ile Pro Val Leu Val Val Arg
                    150
<210> 10214
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10214
Glu Val Lys Met Lys Val Asp Ala Leu Thr Gln Lys Ala Glu Glu Glu
Ile Ser Ala Leu Ile Ala Lys Lys Ile Ala Glu Leu Arg Lys Lys Thr
Gly Gln Glu Val Ser Glu Ile Glu Phe Ile Ala Arg Glu Ala Met Thr
Gly Leu Glu Gly Tyr Glu Val Lys Ile Lys Leu Leu
<210> 10215
<211> 882
<212> PRT
<213> Enterobacter cloacae
<400> 10215
Leu Pro Met Lys Gly Lys Tyr Lys Ala Ala Ile Ala Leu Leu Leu Leu
```

1				5					10					15	
	Leu	Leu	Val 20	_	Leu	Thr	Leu	Leu 25		Thr	Leu	Ala	Gln 30		Val
Pro	Thr	Leu 35	Ala	Gly	Ile	Trp	Leu 40	Pro	Val	Gly	Thr	Arg 45	Ile	Ala	Phe
Glu	Glu 50	Ser	Pro	Arg	Leu	Thr 55	Arg	His	Ala	Leu	Ile 60	Ile	Pro	Asp	Leu
Arg 65	Tyr	Leu	Val	Glu	Glu 70	Cys	Glu	Ile	Ala	Arg 75	Val	Glu	Asn	Val	Thr 80
Leu	Ser	His	Pro	Ser 85	Arg	Trp	Asp	Leu	Asp 90	Ile	Gly	Ala	Leu	Glu 95	Leu
Asn	Ser	Val	Cys 100	Leu	Ser	Lys	Leu	Pro 105	Gln	Ser	Ala	Ser	Ser 110	Thr	Val
Ala	Pro	Lys 115	Thr	Leu	Ala	Gln	Trp 120	Gln	Ala	Ile	Leu	Pro 125	Asn	Thr	Trp
Leu	Thr 130	Ile	His	Arg	Phe	Thr 135	Leu	Ser	Pro	Trp	Gln 140	Gln	Trp	Glu	Gly
145					150				_	155	_			_	Asn 160
_				Ser 165			_		170		_			175	
			180	Asp				185	_				190		_
		195		Phe			200				-	205			
_	210			Val		215					220				
225	_		_	Leu	230	_		_		235	_				240
		_	_	Asn 245					250					255	
	•		260	Leu				265					270		
	_	275		Met		_	280		_		_	285	_		_
	290	_		Glu	_	295					300				
305					310					315					Pro 320
_				325					330					335	Gly
			340	Asn				345					350		
		355		Leu	_	_	360					365		_	
	370	•		Arg		375					380				
385	_	_		Leu	390					395					400
	_			Ala 405					410					415	
			420	Leu				425					430		
		435		Trp			440					445			
	450	_	_	Asp		455	_		_		460	_	_		
465				Asp	470					475					480
rnr	met	ьeu	val	Ser 485	ьys	PTO	Arg	ьeu	490	ren	нар	п1S	rro	val 495	Arg

```
Trp Ser Arg Asp Pro Asp Asn Pro Thr Phe Ser Gly Ala Leu Ala Leu
            500
                                505
Asn Ala Gly Gln Thr Ser Phe Ser Gly Gly Ser Val Leu Pro Pro Ser
                            520
Val Leu Thr Phe Ser Val Asp Gly Thr Asp Pro Thr Val Phe Gln Phe
                       535
                                            540
Lys Gly Asn Leu His Ala Asp Asp Ile Gly Pro Val Gln Val Asn Gly
                    550
                                        555
Arg Trp Asp Gly Glu Arg Leu Arg Gly Lys Ala Trp Trp Pro Lys Gln
                565
                                    570
                                                        575
Ser Leu Thr Val Phe Gln Pro Leu Ile Pro Pro Asp Trp Lys Met Thr
                                585
Leu Arg Gly Gly Glu Met Tyr Ala Gln Val Ala Phe Ser Ala Ala Ser
                            600
Asp Gln Gly Phe Glu Ala Gly Gly His Gly Val Leu Lys Ala Gly Ser
                        615
Ala Trp Met Pro Asp Asn Glu Ile Asn Gly Ala Asp Phe Val Leu Pro
                    630
                                        635
Phe Arg Leu Ser Gln Asp Thr Trp Ser Leu Gly Thr Arg Gly Pro Val
                                    650
                645
Thr Leu Arg Ile Asp Glu Val Lys Asn Leu Val Thr Ala Arg Asn Ile
            660
                                665
                                                    670
Thr Ala Asp Leu Gln Gly Asp Tyr Pro Trp Thr Glu Ala Asn Pro Leu
        675
                            680
                                                685
Leu Leu Thr Asn Val Lys Val Glu Ala Leu Gly Gly Lys Ile Thr Met
                        695
                                            700
Gln Gln Leu Arg Met Pro Gln His Asp Pro Ala Leu Leu Arg Val Asp
                    710
                                        715
Asn Ile Ser Ser Ser Glu Leu Ile Ser Ala Val Asn Pro Lys Gln Phe
                                    730
                725
Ala Met Ser Gly Pro Val Ser Gly Ala Leu Pro Phe Trp Leu Asp Asn
            740
                                745
                                                    750
Glu Lys Trp Ile Ile Lys Asp Gly Trp Leu Thr Asn Pro Gly Pro Met
        755
                            760
                                                765
Thr Leu Arg Ile Asp Gln Asp Thr Ala Asp Ala Ile Val Lys Asp Asn
                        775
                                            780
Val Val Ala Gly Ala Ala Ile Asn Trp Leu Arg Tyr Met Glu Ile Ser
                    790
                                        795
Gln Ser Trp Thr Lys Leu Asn Val Asp Asn Leu Gly Val Leu Thr Met
                805
                                    810
Gln Ala Ala Ile Lys Gly Thr Ser Arg Val Glu Gly Lys Ser Ser Phe
            820
                                825
                                                    830
Val Asn Leu Asn Tyr Thr His Glu Glu Asn Ile Phe Thr Leu Trp Arg
                            840
Ser Leu Arg Phe Gly Asp Asn Leu Gln Thr Trp Phe Glu Gln His Ala
                        855
                                            860
Ala Ile Pro Leu Leu Arg Gly Ser Thr Gly Lys Glu Ser Glu Gln
                    870
                                        875
Gln
```

```
<210> 10216
```

<sup>&</sup>lt;211> 116

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<sup>&</sup>lt;400> 10216

Asn Pro Ala Ala Ile Cys Ser Glu Asp Ala Met Lys Arg Leu Ala Leu 1 5 10 15

Met Leu Leu Ala Leu Gly Met Asn Val His Ala Ala Thr Leu Thr Leu 20 25 30

```
Asn Asp Ala Arg Ala Gln Gly Arg Val Gly Glu Thr Leu Ser Gly Tyr
                             40
Leu Ala Pro Val Gln His Asp Ala Glu Thr Leu Ala Leu Val Ser Arg
                        55
                                             60
Ile Asn Ala Ala Arg Thr Glu Ser Tyr Gln Gln Leu Ala Asp Ser Asn
                    70
                                         75
Asn Leu Pro Val Asp Glu Val Ala Lys Met Ala Gly Gln Lys Leu Val
                85
                                     90
Ala Arg Ala Gln Pro Gly Glu Tyr Val Lys Gly Ile Asn Gly Lys Trp
                                 105
·Leu Lys Lys
       115
<210> 10217
<211> 258
<212> PRT
<213> Enterobacter cloacae
<400> 10217
Trp Tyr Arg Ala Tyr Val Arg Leu Gly Met Asn Asn Val Ser Ala Tyr
                                     10
Ala Leu Cys Leu Gly Asp Asn Gly Leu Val Leu Ser Gln Arg Leu Gly
                                 25
Ala Trp Cys Gly His Ala Pro Glu Leu Glu Ile Asp Leu Ala Leu Ala
        35
                                                 45
Asn Ile Gly Leu Asp Leu Leu Gly Gln Ala Arg Asn Phe Leu Thr Tyr
Ala Ala Glu Arg Glu Gly Lys Gly Asp Glu Asp Thr Leu Ala Tyr Gly
                    70
                                         75
Arg Asp Glu Arg Gln Phe Arg Asn Leu Leu Leu Val Glu Gln Pro Asn
                85
                                     90
Gly Ser Phe Ala Asp Thr Ile Ala Arg Gln Tyr Leu Met Asp Ala Trp
                                 105
                                                     110
Asn Val Ala Leu Tyr Glu Arg Leu Ile His Ser Ser Asp Ser Gln Leu
                            120
                                                 125
Ala Ala Ile Ala Ala Lys Ala Ile Lys Glu Ala Arg Tyr His Leu Arg
                        135
                                             140
Phe Ser Arg Gly Trp Leu Val Arg Leu Gly Asp Gly Thr Glu Thr Ser
                    150
                                         155
Ala Gln Lys Met Gln Gln Ala Val Asp Ser Leu Trp Arg Phe Thr Ala
                                     170
                165
Glu Leu Phe Asp Ala Asp Glu Val Glu Leu Ala Leu Ile Asp Asp Gly
            180
                                 185
                                                     190
Val Ala Val Asp Pro Arg Asp Leu Arg Asp Pro Trp Glu Arg Glu Val
                             200
                                                 205
Phe Ala Gly Leu Ala Glu Ala Thr Leu Arg Val Pro Glu Glu Val Ala
Tyr Arg Thr Gly Gly Lys Lys Gly Leu His Thr Glu His Leu Gly Pro
                    230
                                         235
Met Leu Ala Glu Met Gln Tyr Leu Gln Arg Val Tyr Pro Gly Gln Gln
Trp
<210> 10218
<211> 400
<212> PRT
<213> Enterobacter cloacae
<400> 10218
```

Ala Ala Arg Ala Val Arg Ala Pro Ile Pro Arg Leu Ser Val Asn Leu

10 Asp Pro Arg Pro Ala Lys Arg Ser Thr Ala Ala Ile Pro Ala Val Ser 25 20 Pro Ser Thr Ile Ser Asn Val Phe Glu Ala Ala Met Thr Thr Phe His 40 45 Ser Leu Thr Val Ala Lys Val Glu Pro Glu Thr Arg Asp Ala Val Thr 55 60 Ile Thr Phe Ala Val Pro Gln Ala Leu Gln Glu Ala Tyr Arg Phe Arg 70 75 Pro Gly Gln His Leu Thr Leu Lys Ala Ser Pro Gly Gly Asp Glu Leu 85 90 Arg Arg Cys Tyr Ser Ile Cys Arg Ser Thr Ala Cys Gly Glu Ile Ser 100 105 Val Ala Val Lys Ala Ile Glu Gly Gly Arg Phe Ser Arg Tyr Ala Arg 120 Asp Glu Ile Lys Pro Gly Met Ala Leu Glu Val Met Val Pro Gln Gly 135 His Phe Gly Tyr Gln Pro Gln Ala Glu Arg Glu Gly His Tyr Leu Ala 150 155 Ile Ala Ala Gly Ser Gly Ile Thr Pro Met Leu Ala Ile Met Ser Ala 165 170 Thr Leu Ala Thr Glu Ala His Ser His Phe Thr Leu Ile Tyr Gly Asn 185 180 Arg Ser Ser Gln Ser Met Met Phe Arg Arg Ala Leu Ala Asp Leu Lys 200 205 Asp Lys Tyr Pro Gln Arg Leu Gln Leu Ile Ala Ile Phe Ser Gln Glu 215 220 Thr Leu Asp Ser Asp Leu Leu His Gly Arg Ile Asp Gly Glu Lys Leu 230 235 Gln Ala Leu Ala Lys Thr Leu Val Asn Phe Arg Gln Tyr Asp Glu Ala 250 245 Phe Ile Cys Gly Pro Ser Ala Met Met Asp Glu Ala Glu Ala Ala Leu 260 265 Gln Ala Leu Gly Met Pro Glu Lys Ala Ile His Leu Glu Arg Phe Asn 280 Thr Pro Gly Thr Ala Val Lys Arg Thr Ala Ser Val Gln Ala Asp Gly 295 300 Gln Lys Val Thr Val Arg Gln Asp Gly Arg Asp Arg Glu Ile Thr Leu 310 315 Thr Ala Asp Asp Glu Ser Ile Leu Asp Ala Ala Leu Arg Gln Gly Ala 325 330 Asp Leu Pro Tyr Ala Cys Lys Gly Gly Val Cys Ala Thr Cys Lys Cys 340 345 350 Lys Val Leu Arg Gly Lys Val Asp Met Ala Thr Asn Tyr Ser Leu Glu 360 Pro Asp Glu Leu Ala Ala Gly Tyr Val Leu Ser Cys Gln Ala Leu Pro 375 Leu Thr Ala Asp Val Ile Val Asp Phe Asp Ala Lys Gly Met Ala 400 <210> 10219

<211> 171

<212> PRT

<213> Enterobacter cloacae

## <400> 10219

Arg Cys Trp Arg Thr Cys Asn Val Thr Thr Ala Arg Asn Ala Ile Ala 10 Pro Val His Cys Cys Ala Ser Val Arg Phe Trp Arg Val Ala Met Ser His Asn Ala Trp His Asn Ala Arg Ala Met Tyr Glu Arg Asp Ala Cys

40 Ala Gln Ala Met Gly Met Asp Ile Leu Asp Met Gly Glu Gly Tyr Ser 55 60 Val Val Thr Met Thr Ile Thr Pro Gln Met Leu Asn Gly His Lys Thr 70 7.5 Cys His Gly Gly Gln Leu Phe Ser Leu Ala Asp Thr Ala Phe Ala Tyr 90 85 Ala Cys Asn Ser Gln Gly Leu Ala Ala Val Ala Ser Gly Cys Ala Ile 100 105 Asp Phe Leu Arg Pro Gly Phe Ala Gly Asp Lys Leu Thr Ala Thr Ala 120 125 Arg Val Lys His Gln Gly Lys Leu Thr Gly Val Tyr Asp Ile Glu Ile 135 140 Gln Asn Gln Gln Lys Thr Val Ala Leu Phe Arg Gly Lys Ser His 150 Arg Thr Gly Gly Ser Met Thr Gly Glu Ala

<210> 10220 <211> 326 <212> PRT

<213> Enterobacter cloacae

<400> 10220 Glu Lys Cys His Asn Ala Gly Asn Thr Cys Ala Gly Asn Ala Leu Met 10 Ile Asp Ala Gly His Ile Ser Ile Arg Ala Leu Leu Ile Phe Ile Asp 25 20 Val Tyr Glu Thr Gln Asn Phe Ser Val Val Ala Arg Arg Glu Gly Ile 35 40 Ser Ala Ser Gln Val Ser Arg Val Ile His Gln Leu Glu Asp Ala Leu 55 Gly Gln Gln Leu Phe Tyr Arg Asn Thr Arg Ala Ile Met Pro Thr Glu 70 75 Ser Gly His Leu Phe Val Arg Tyr Ala Arg Ala Met Ala Gly Asn Met 85 90 Glu Asp Ala Arg Arg Glu Leu Asp Glu Arg Ala Arg Glu Pro Ser Gly 100 105 110 Thr Leu Arg Ile Asn Gly Pro Val Phe Phe Gly Gln Arg His Ile Ala 120 125 Pro Gly Leu Pro Gly Leu Leu Ala Arg Tyr Pro Arg Leu Ser Ile Glu 135 140 Leu Thr Leu Thr Asp Asp Phe Ile Asp Pro His Arg Asp Ala Ala Asp 150 155 Val Ile Phe Arg Ile Gly Ala Leu Thr Asp Ser Ser Phe His Ala Arg 170 Val Phe Gly Gln Gln Phe Tyr His Leu Ala Ala Ser Pro Asp Tyr Leu 185 Gln Lys His Gly Ala Pro Glu Gly Pro Asp Asp Leu Ser Arg His His 200 195 Cys Leu Val Tyr Arg Gly Ser Ser Gly Pro Asn Arg Trp Leu Ile Arg 215 220 Gln Pro Gly Glu Ala Trp Val His Tyr Pro Ile Val Pro Leu Met Thr 230 235 Ser Asn Asn Ala Glu Thr Leu Leu Ile Ala Ala Leu Gly Gly Met Gly 245 250 Val Val Leu Phe Pro Asp Trp Met Val Ser Glu Arg Leu Lys Ser Gly 265 270 Glu Leu Val Ala Leu Leu Pro Glu Met Glu Cys Ser Ile Asn Thr Glu 280 285 Pro Leu Thr Ile Ala Ala Ile Tyr Pro Asn Ala Arg His Pro Pro Leu

300 295 Asn Val Arg Ala Val Ile Asp Tyr Tyr Ile Glu Arg Phe Gly Thr Pro 315 310 Leu Tyr Trp Gln Thr 325 <210> 10221 <211> 161 <212> PRT <213> Enterobacter cloacae <400> 10221 Leu Gln Glu Gln Val Met Thr Val Pro Val Gln His Pro Met Tyr Ile Asp Gly Gln Phe Val Ala Trp Gln Gly Asp Ala Trp Ile Asp Val Ile 25 Asn Pro Ala Thr Glu Glu Val Ile Ser Arg Ile Pro Asp Gly Thr Ala 45 Glu Asp Ala Arg Lys Ala Ile Asp Ala Ala Glu Arg Ala Gln Ala Gly 55 Trp Glu Ala Leu Pro Ala Ile Glu Arg Ala Ser Trp Leu Arg Lys Ile 75 70 Ser Ala Gly Ile Arg Glu Arg Val Ser Glu Ile Ser Ala Leu Ile Val 90 8.5 Ala Glu Gly Gly Lys Ile Gln Gln Leu Ala Glu Val Glu Val Asn Phe 100 105 Thr Ala Asp Tyr Ile Asp Tyr Met Ala Glu Trp Ala Arg Arg Tyr Glu 120 125 115 Gly Asp Ser Phe Arg Ala Thr Val Asp Met Pro Gly Ala Lys Val Val 135 140 Arg Thr Ile Gln Ser Asp Ser Arg His Ala Arg Gly Glu Gly Ser Ala 150 155 Tyr <210> 10222 <211> 556 <212> PRT <213> Enterobacter cloacae <400> 10222 Lys Val Asn His Val Met Arg Leu Pro Gln Arg Asp Pro Tyr Ala Pro 5 1 10 Arg Glu Trp Gln Pro His Glu Lys Pro Ala Leu Leu Gly Ser Pro Ser 20 Thr Pro Glu His Pro Thr Pro Lys Arg Ile Ala Tyr Gly Val Val Gly 40 Leu Leu Val Cys Leu Thr Gly Ala Leu Gly Asn Ala Val Val Thr Ala Asn Leu Gln Asn Leu Gln Gly Thr Phe Gly Ala Trp Ser Thr Glu Ile Ala Trp Leu Pro Ala Val Tyr Val Met Thr Asn Val Ser Ile Asn Leu 85 Leu Leu Val Lys Phe Arg Gln Gln Tyr Gly Leu Arg Ala Phe Thr Glu 100 105 Gly Phe Leu Val Leu Tyr Val Leu Val Thr Phe Phe His Leu Phe Val 115 120 Asn Asp Leu Ser Ser Ala Leu Met Val Arg Ala Ala His Gly Met Val 135 140 Ala Ala Leu Ser Ser Leu Gly Ile Tyr Tyr Gln Ile Gln Ala Trp

150

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Pro Ala Lys His Arg Leu Lys Ala Leu Thr Ile Gly Ile Thr Gly Ser
               165
                                    170
Ser Leu Ala Ile Pro Leu Ala Arg Leu Phe Ser Thr Glu Leu Leu Gln
                                185
           180
Leu Asp Glu Trp Arg Gly Leu Tyr Phe Phe Glu Leu Gly Leu Ala Leu
                            200
                                                205
Ile Ser Leu Ala Cys Val Met Val Leu Lys Leu Pro Pro Gly Asp Arg
                       215
                                            220
Arg Lys Val Phe Glu Lys Lys Asp Phe Ile Thr Phe Phe Leu Leu Ala
                    230
                                        235
Pro Gly Met Ala Leu Cys Ala Val Leu Ser Leu Gly Arg Leu Asp
                                    250
                245
Trp Trp Phe Glu Ala Pro Trp Ile Gly Trp Ala Leu Ala Leu Ser Leu
                                265
Val Leu Ile Val Ser Ala Ile Val Phe Glu His Asn Arg Ser Asn Pro
                            280
Leu Leu Asn Thr Arg Trp Leu Ser Ser Gly Ser Ile Val Arg Leu Gly
                        295
                                            300
Leu Ile Met Leu Leu Ile Arg Ile Val Leu Ala Glu Gln Asn Thr Gly
                    310
                                        315
Val Ile Gly Trp Leu Gln Tyr Val Gly Leu Gln Asn Glu Gln Met Thr
                                    330
                325
His Leu Ala Trp Ala Ile Phe Ala Gly Ile Val Cys Gly Ile Val Thr
            340
                                345
                                                    350
Ser Cys Leu Thr Ile Lys Pro Thr Lys Leu Ala Trp Pro Ile Ile Thr
        355
                            360
                                                365
Ser Leu Val Leu Met Ile Val Ala Ser Leu Leu Asp Ser Gln Ser Asn
                        375
                                            380
Asn Leu Thr Arg Pro Asp Gln Leu Ile Phe Ser Gln Phe Leu Leu Gly
                    390
                                        395
Phe Gly Ser Ala Phe Phe Leu Ala Pro Ala Met Leu Ala Ala Ile Gly
                405
                                    410
Gly Val Ile Ala Asp Pro Arg Asn Leu Val Ser Phe Ser Val Met Phe
            420
                                425
                                                    430
Gly Met Ser Gln Asn Leu Gly Gly Leu Leu Gly Ser Ala Ile Leu Gly
        435
                            440
Thr Phe Gln Thr Trp Arg Glu Lys Tyr His Ser Ser Leu Leu Ala Asp
                        455
                                            460
Gln Leu Thr Thr Leu Asn Pro Leu Val Asn Glu Arg Ile Gln Leu Tyr
                    470
                                        475
Thr Gln Met Tyr Lys Ser Leu Ile Gly Asp Ser Ser Leu Leu Gly Thr
                                    490
                485
                                                        495
Gln Ala Ile Thr Gln Leu Gln Thr Val Thr Ala Leu Glu Ala Asn Ile
            500
                                505
Leu Ala Tyr Asn Asp Thr Tyr Leu Leu Thr Ala Ser Ile Ala Thr Ala
                            520
Thr Leu Val Trp Ile Leu Trp Arg Leu Leu Arg Leu Arg Ile Thr Ala
                        535
Arg Met Ala Leu Lys Asn Ala Thr Gly Asn Lys
                    550
<210> 10223
<211> 484
<212> PRT
<213> Enterobacter cloacae
<400> 10223
Ala Gly Gly Val Pro Ala Ala Ala Pro Trp His Val Gly Ala Gly Asp
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His Arg His Ala Gly Gly Glu Thr Met Thr Leu Arg Pro Ile Ala Gly
20 25 30

Leu Leu Met Met Ala Ile Leu Ala Gly Cys Gln Ser Val Asp Val Glu 40 Pro Ala Lys Ser Ser Leu His Ile Pro Ala Gln Trp Arg Ala Thr Ser 55 60 Gly Pro Ala Ser Pro Thr Glu Gln Leu Trp Trp Arg Asn Phe His Asp 70 75 Ser Asn Leu Asn Arg Tyr Val Asp Gln Ala Leu Lys Asn Asn Ser Asp 85 90 Val Leu Ile Ala Arg Glu Arg Ile Asn Glu Tyr Gln Ala Arg Val Phe 100 105 Ala Ala Asp Gly Ser Leu Phe Pro Ser Leu Asp Ala Gly Val Thr Gly 120 Thr Arg Ala Arg Ser Gln Ser Ala Ala Thr Gly Leu Pro Val Tyr Gly 135 Thr Leu Tyr Lys Gly Ser Leu Thr Ala Ser Tyr Asp Val Asp Ile Trp 150 155 Gly Val Asn Arg Ser Thr Ser Arg Ala Ala Glu Ala Ser Leu Glu Ala 165 170 Gln Lys Ala Ala Ala Ala Ala Asp Leu Thr Val Ala Ser Ser Val 185 180 Ala Ser Gly Tyr Val Thr Leu Leu Ser Leu Asp Glu Gln Leu Arg Val 195 200 205 Thr Gln Ser Thr Leu Lys Ser Arg Glu Glu Ala Phe Asn Leu Ala Lys 215 220 Arg Gln Phe Glu Thr Gly Tyr Ser Ser Arg Leu Glu Leu Met Gln Ser 230 235 Asp Ser Glu Leu Arg Ala Thr Arg Ala Gln Val Pro Leu Leu Gln His 245 250 Gln Ile Ala Gln Gln Glu Asn Ala Leu Ser Leu Leu Gly Ser Asn 260 265 270 · Pro Gly Asp Val Ala Arg Gly Glu Ser Phe Asp Ala Leu Thr Pro Leu 275 280 Lys Leu Pro Ser Gln Leu Pro Ser Thr Leu Leu Asn Arg Arg Pro Asp 295 300 Ile Val Gln Ala Glu Arg Gln Leu Ile Ala Ala Asp Ala Thr Leu Ala 310 315 Ala Ser Arg Ala Ser Leu Leu Pro Ser Ile Asn Leu Thr Ala Thr Gly 325 330 Ser Val Gln Asp Arg Thr Leu Ser Gly Leu Leu Asp Asn Pro Leu Gln 340 345 Leu Trp Ser Val Gly Gly Ser Ile Leu Ala Pro Leu Leu Asn Arg Gln 360 Ala Leu Asn Ala Gln Val Asp Ile Ser Gln Ser Gln Arg Asn Gln Ala 375 Leu Tyr Ser Tyr Glu Lys Thr Val Arg Asn Ala Phe Ala Glu Val Asn 390 Asp Ser Leu Asp Ala Ile Thr Arg Tyr Gln Glu Gln Leu Thr Glu Leu 410 Leu Ala Gln Gln Ala Val Ala Gln Glu Thr Leu Arg Ile Ala Gln Asn 420 425 Arg Tyr Arg Asn Gly Tyr Ser Ser Tyr Leu Asp Val Leu Asp Ala Gln 435 440 Arg Thr Leu Phe Ser Val Gln Thr Ser Val Val Gln Val Lys Asn Asn 455 460 Leu Leu Leu Ala Gln Ile Asp Leu Tyr Lys Ala Leu Gly Gly Gly Trp 470 475 Ser Ser Ala

<212> PRT <213> Enterobacter cloacae

<400> 10224 Phe Gly Gly Tyr Cys Cys Tyr Thr Arg Tyr His Gly Lys Arg Cys Gly 10 Glu Arg Leu Ser Val Asn Phe Gln Asp Ile His Thr Tyr Tyr Gln Gln 25 Leu Asn Ile Gly Gln Phe Phe Pro His Met Leu Cys Lys Gly Glu Ala Leu Thr Val Ala Ala Asn Lys Lys Leu Thr Val Glu Pro Gly Tyr Ile 55 Tyr Phe Cys Thr Glu Gly Ser Leu Thr Ile Leu Met Pro Asp Asp Gly 75 Leu Asn Ile Gly Asn Thr Ile Glu Tyr Met Pro Ile Gly Leu Met Glu 85 Arg Tyr Cys Pro Leu Ala Lys Tyr Glu Tyr Arg Ser Ser Ala Lys Val 105 Lys Leu Val Arg Ile Ser Trp Val Asp Phe Asp Gln Ile Phe Phe Gln 120 125 Gly Gly Pro Glu Arg Met Gln Ala Leu Ala Thr Ile Leu Thr Tyr Met 135 140 Ser Ile Phe Thr Ile Asp Leu His Asn Glu Arg Arg Gln Val Thr Ser 150 155 Tyr Gln Thr Ile Lys Pro Met Leu Tyr Arg Tyr Leu Tyr Arg Gln Glu 170 165 Thr His Thr Gly Glu Asn Glu Gly Leu Ala Leu Phe Ile Ile Lys Arg 180 185 Thr Asn Leu Ser Arg Thr His Val Phe Arg Val Leu Ala Asp Leu Lys 200 Ala Gly Gly Tyr Ile Thr Met Lys Arg Gly Lys Leu Val Ser Ile Asp 215 Arg Pro Leu Pro Asp Ala Tyr

<210> 10225 <211> 697

<212> PRT

<213> Enterobacter cloacae

## <400> 10225

Phe Glu Ile Lys Leu Phe Ile Val Lys Ser Arg Asn Ile Trp Arg Glu Glu Met Gln Gln Leu Ala Ser Phe Leu Ser Gly Ile Trp Gln Ser Gly Arg Gly Arg Glu Arg Thr Ile Thr His Ala Ile Ser Gly Glu Thr Leu Tyr Gln Val Thr Ser Glu Gly Leu Asp Met Ala Ala Ala Arg Arg Tyr 55 Ala Ile Glu His Gly Gly Glu Val Leu Arg Ala Met Ser Phe Ile Glu 75 Arg Ala Ala Met Leu Lys Ala Val Ala Lys His Leu Leu Ser Gln Lys 85 90 Asp Arg Phe Tyr Ala Leu Ser Ala Gln Thr Gly Ala Thr Lys Ala Asp 100 105 110 Ser Trp Val Asp Ile Glu Gly Gly Ile Gly Thr Leu Phe Thr Tyr Ala 120 125 Ser Leu Gly Ser Arg Glu Leu Pro Asp Asp Thr Leu Trp Pro Glu Asp 135 140 Glu Leu Ile Pro Leu Ser Lys Glu Gly Gly Phe Ala Ala Arg His Val 155

Leu Thr Ser Lys Ser Gly Val Ala Val His Ile Asn Ala Phe Asn Phe 165 170 Pro Cys Trp Gly Met Leu Glu Lys Leu Ala Pro Thr Trp Leu Ala Gly 185 180 Met Pro Ala Ile Ile Lys Pro Ala Thr Ala Thr Ala Gln Val Thr Gln 200 205 Ala Met Val Lys Ala Ile Val Glu Ser Gly Leu Val Pro Asp Gly Ala 215 220 Ile Ser Leu Ile Cys Gly Gly Ala Gly Asp Leu Leu Asn His Leu Asp 230 235 Ser Gln Asp Val Val Thr Phe Thr Gly Ser Ala Ser Thr Gly Gln Ser 245 250 Leu Arg Val His Pro Asn Ile Val Ala His Ser Ile Pro Phe Thr Met 265 Glu Ala Asp Ser Leu Asn Cys Cys Val Leu Gly Glu Asp Val Thr Pro 280 Glu Gln Pro Glu Phe Thr Leu Phe Ile Arg Glu Val Val Arg Glu Met 295 300 Thr Ala Lys Ala Gly Gln Lys Cys Thr Ala Ile Arg Arg Ile Ile Val 310 315 Pro Glu Ala Gln Val Glu Ala Val Ser Gln Ala Leu Ile-Ala Arg Leu 325 330 Glu Asn Val Val Gly Asp Pro Ala Gln Glu Gly Val Lys Met Gly 340 345 Ala Leu Val Asn Ser Glu Gln Arg Ala Asp Val Gln Glu Lys Val Asp 360 365 His Leu Leu Ala Ser Gly Cys Gln Ile Arg Leu Gly Gly Lys Ala Asp 375 380 Leu Gln Ala Pro Gly Ala Phe Phe Pro Pro Thr Leu Leu Phe Cys Pro 390 395 Gln Pro Asp Glu Thr Pro Ala Val His Ala Thr Glu Ala Phe Gly Pro 405 410 Val Ala Thr Leu Met Pro Cys Arg Asn Thr Glu His Ala Met Gln Leu 420 425 Ala Arg Ala Gly Gly Ser Leu Ala Gly Thr Leu Val Thr Ala Asp 440 435 Thr Arg Val Ala Arg Gln Phe Ile Ala Gly Ala Ala Arg Ala His Gly 450 455 460 Arg Ile Gln Ile Leu Asn Gln Glu Ser Ser Lys Glu Ser Thr Gly His 470 475 Gly Ser Pro Leu Pro Gln Leu Val His Gly Gly Pro Gly Arg Ala Gly 485 490 Gly Glu Glu Leu Gly Gly Leu Arg Ala Val Lys His Tyr Leu Gln 505 Arg Thr Ala Ile Gln Gly Ser Pro Ser Met Leu Ala Ala Ile Gly Lys 520 Gln Trp Val Arg Gly Ala Glu Val Gln Glu Asp Arg Val His Pro Phe 535 540 Arg Lys Tyr Phe Glu Glu Leu Gln Pro Gly Asp Ser Leu Leu Thr Pro 550 555 Arg Arg Thr Leu Thr Glu Ala Asp Ile Val Asn Phe Ala Cys Leu Ser 565 570 Gly Asp His Phe Tyr Ala His Met Asp Lys Ile Gly Ala Ala Glu Ser 585 590 Ile Phe Gly Glu Arg Val Val His Gly Tyr Phe Leu Ile Ser Ala Ala 600 Ala Gly Leu Phe Val Asp Ala Gly Val Gly Pro Val Ile Ala Asn Tyr 615 620 Gly Met Glu Asn Leu Arg Phe Ile Glu Pro Val Lys Pro Gly Asp Thr 635 630 Ile Gln Val Arg Leu Thr Cys Lys Arg Lys Thr Leu Lys Lys Gln Arg

645 650 Thr Ala Glu Glu Lys Pro Thr Gly Val Val Glu Trp Ala Val Glu Ile 665 660 Phe Asn Gln His Gln Gln Ala Val Ala Leu Tyr Ser Ile Leu Thr Leu 680 675 Val Ala Arg Gln Gln Gly Asp Phe 690 <210> 10226 <211> 77 <212> PRT <213> Enterobacter cloacae <400> 10226 Arg Ile Ser Thr Arg Gly Glu Asn Thr Met Met Thr Tyr Asp Arg Asn Arg Asn Ala Ile Thr Thr Gly Ser Arg Val Met Ile Ser Gly Thr Gly 25 Gln Phe Gly Val Ile Lys Ala Ile His Ser Asp Gly Leu Asn Ala Glu 40 Gln Val Arg Arg Gly Lys Thr Val Glu Val Glu Gly Cys Glu Gly Lys 55 Phe Glu Pro Ile Glu Leu Ile Arg Leu Gly Met His 70 <210> 10227 <211> 313 <212> PRT <213> Enterobacter cloacae <400> 10227 Arg Asp Leu Pro Lys Trp Leu Leu Trp Ala Arg Asn Ile Pro His Tyr 10 Tyr Lys Ile Arg Phe Leu Asn Phe Arg Val Asn Ile Met Ile Tyr Asp 20 25 Cys Phe Leu Tyr Tyr Asp Glu Asp Met Leu Leu Asp Ile Arg Leu His 40 Thr Leu Ala Asp Val Val Asp Arg Phe Val Ile Val Glu Ala Thr His 55 Ser Phe Thr Gly Ile Pro Arg Glu Leu His Phe Asp Ile Thr Lys Phe 70 75 Ala Lys Phe Lys Asp Lys Ile Ile Tyr Val Pro Phe Asp Ala Gln Pro 85 90 Ile Leu Asn Arg Ala Asp Asn Gln Val Asp Ala Trp Ala Asn Glu 100 105 Ala Ala Leu Arg Asn Ser Ile Met Asn Gly Leu Lys Asp Ala Ala Asp 120 Asp Asp Leu Ile Leu Val Ser Asp Val Asp Glu Ile Phe Ser Pro Asp 135 Thr Val Arg Ala Ile Asn Pro Arg Ala Leu Cys Thr Thr Ile His Gln 150 155 Asn Val Phe Asn Tyr Gln Phe Asn Leu Gln Val His Asn Thr Asp Gly 165 170 Thr Pro Arg Lys Cys Thr Leu Pro Arg Ala Thr Ser Tyr Tyr Asn Leu 185 190 180 Lys His Phe Phe His Gly Glu Pro Glu Ser Phe Arg Asn Trp Lys Arg 195 200 205 Ala Arg Lys Asp Lys Asn Trp Ser Trp Phe Lys Trp Asn Trp Leu Lys 220 215 Ile Asn Asn Lys Ile Val Lys Asp Gly Gly Trp His Phe Ser Trp Val 230 235

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Met Thr Pro Glu Arg Ile Ser Glu Lys Met Ser Thr Ile Ser His Thr
                245
                                    250
Glu Tyr Asp Leu Pro Glu Phe Asn Asn Pro Glu His Ile Met Lys Val
                                265
            260
Ile Thr Asn Ala Glu Asp Ile Trp Gly Arg Asp Arg Lys Leu Val Arg
                            280
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Gln Glu Val Ser Lys Arg Thr Leu Pro Ser Tyr Leu Val Asp Asn Gln
                        295
His His Tyr Ser Gln Phe Ile Leu
<210> 10228
<211> 116
<212> PRT
<213> Enterobacter cloacae
<400> 10228
Pro Cys Tyr Ala Tyr Ser Leu His Ser Glu Lys Glu Leu Gln Met Lys
Arg Leu Pro Trp Ile Thr Ala Leu Leu Leu Met Ser Ala Ser Pro Ala
            20
Leu Leu Ala Ala Pro Asp Ser Cys Glu Arg Val Lys Ser Asp Ile Gln
                             40
Gln Lys Ile Ile Asn Asn Gly Val Pro Glu Ser Gly Phe Thr Leu Asn
                        55
Ile Val Pro Asn Asp Gln Ala Asp Gln Pro Asp Ala Gln Val Val Gly
                    70
                                         75
His Cys Ala Asn Asp Thr Phe Lys Ile Leu Tyr Thr Arg Thr Ser Ser
                8.5
Gly Asn Tyr Pro Val Ser Gly Ala Gly Thr Gln Glu Asn Ala Pro Ala
Glu Pro Gln
        115
<210> 10229
<211> 90
<212> PRT
<213> Enterobacter cloacae
<400> 10229
Pro Cys Gly Cys Arg Ala Thr Arg Tyr Gln Lys Trp Gly Tyr Gly Ala
Arg Leu Gln Arg Pro Arg Arg Ser Ala His Cys Cys Glu Ser His Pro
Ala His His Ala Arg Arg Lys Arg Asp Gly Pro Gly Arg Trp His Asp
                             40
Ala Asn Met Asn Gly Asp Arg Val Asp His Gly Ser Cys Ile Asn Thr
Leu Thr Thr His Arg Pro Ser Pro Leu Ala Lys Gly Asn Pro Gln His
                    70
                                         75
Thr Asn Leu Val Gln Ile Glu Lys Ala
<210> 10230
<211> 261
<212> PRT
<213> Enterobacter cloacae
<400> 10230
Ala Phe Arg Gln Ser Ser Asn Arg Arg Tyr Ser Leu Leu Ile Lys Leu
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Lys Lys Glu Arg Thr His Gln Glu Asp Arg Leu Ala Leu Trp Leu

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25
Ala Thr Ser Ala Gly Leu Leu Asn Ala Ile Ala Leu Gly Ala Phe Gly
                            40
Phe Phe Pro Ser His Met Thr Gly Asn Thr Ser Gln Leu Ser Ser Glu
                        55
                                            60
Val Ser Ser Thr Asp Leu Ser Asp Ile Leu Phe Phe Gly Ala Ile Ile
                    70
                                        75
Leu Ser Phe Val Ser Gly Ala Ile Ala Ala Arg Ile Ile Val Ile Trp
                                    90
                85
Gly Ile Ile His Asn Ile Arg Leu Val Phe Ser Gln Val Leu Phe Val
                                105
Glu Gly Leu Leu Ala Gly Val Ser Leu Tyr Glu Met Tyr Phe His
                            120
Ser Phe Ala Thr Asn Gln Glu Ile Ile Ile Phe Leu Cys Gly Leu Met
                        135
                                            140
Gly Ile His Asn Ser Thr Ser Thr Gln Leu Ser Gly Gly Arg Val Arg
                    150
                                        155
Ser Thr His Ile Thr Gly Thr Leu Thr Asp Ala Gly Ile Ser Leu Ala
                                    170
                165
Ser Val Met Val Ala Met Leu Arg Arg Asp Tyr Ser Lys Asp Thr Ala
            180
                                185
                                                    190
Ala Gln Lys Ser Gln Leu Lys Thr His Leu Thr Thr Leu Phe Ser Phe
                            200
        195
Ile Ser Gly Gly Ile Ala Gly Leu Ile Leu Phe Arg Glu Phe Gly Phe
                                            220
                        215
His Ala Met Leu Ala Leu Gly Leu Met Leu Val Val Ala Ala Phe
                    230
                                        235
Ser Ile Val Arg Ile Ser Trp Arg Val Arg Lys Val Arg Ala Ala Leu
                                    250
                245
Ser Arg Gln Val
            260
<210> 10231
<211> 224
<212> PRT
<213> Enterobacter cloacae
<400> 10231
Gln Thr Val Ala Val Gly Gly Ala Met Glu Thr Ile His Tyr Ile Leu
Asp Asn Trp Asp Tyr Leu Leu Thr Leu Thr Leu Gln His Leu Trp Leu
Val Ala Leu Ala Val Gly Leu Ala Ile Ile Gly Val Pro Leu Gly
Ile Leu Ile Val Arg His Lys Trp Leu Ala Thr Pro Val Leu Gly Ile
                        55
Ala Thr Ile Val Leu Thr Ile Pro Ser Ile Ala Leu Phe Gly Leu Met
                                        75
Ile Pro Leu Phe Ser Leu Ile Gly Gln Gly Ile Gly Ala Leu Pro Ala
                85
                                    90
Ile Thr Ala Val Phe Leu Tyr Ser Leu Leu Pro Ile Val Arg Asn Thr
            100
                                105
                                                    110
His Thr Ala Leu Asp Ser Leu Pro Pro Gly Leu Arg Glu Ala Gly Arg
                            120
                                                125
Gly Ile Gly Met Thr Phe Trp Gln Arg Leu Arg Trp Val Glu Ile Pro
                        135
                                            140
Met Ala Leu Pro Val Ile Phe Gly Gly Ile Arg Thr Ala Val Val Met
                    150
                                        155
Asn Ile Gly Val Met Ala Ile Ala Ala Val Ile Gly Ala Gly Gly Leu
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170

Gly Leu Leu Leu Asn Gly Ile Gly Gly Ser Asp Ile Arg Met Leu 180 185 Ile Ala Gly Ala Leu Met Ile Cys Leu Leu Ala Ile Val Leu Asp Trp 200 195 Leu Leu His Arg Leu Gln Val Val Leu Thr Pro Lys Gly Ile Arg 210 215 <210> 10232 <211> 501 <212> PRT <213> Enterobacter cloacae

340

<400> 10232 Phe Arg His Glu Asp Phe Met Lys Asn Asn Tyr Gln Gln Leu Thr Arg Thr Phe Gln Arg Leu Ser Arg Phe Ser His Leu Ser Ser Ile Ala 20 25 Ser Trp Asp Met Phe Thr Met Met Pro Pro Gly Gly Ser Ala Ala Arg 35 40 Gly Glu Ala Leu Ala Glu Met Ser Val Leu Gln His Gln Ile Leu Thr 55 Asp Lys Lys Val Gly Glu Trp Leu Ala Ala Ala Ala Asp Glu Asp Leu 70 75 Asn Asp Val Glu Leu Ala Asn Leu Arg Glu Met Thr Arg Tyr Tyr Gln 90 95 85 Gln Ala Thr Leu Leu Pro Glu Ser Leu Val Glu Ala Lys Ser Leu Ala 105 100 Gly Ser Arg Cys Glu His Ala Trp Arg Thr Gln Arg Pro Ala Asn Asp 120 115 Trp Gln Gly Phe Ser Ala Asn Leu Lys Glu Val Val Lys Leu Ser Arg 135 Glu Glu Ala Arg Leu Arg Ala Glu Ala Lys Gly Cys Thr Pro Tyr Asp 150 155 Ala Leu Leu Asp Ile Phe Glu Pro Asp Met Thr Ser Ala Arg Leu Asp 170 165 Val Leu Phe Gly Asp Leu Lys Ser Trp Leu Pro Glu Leu Leu Ala Lys 180 185 Val Val Glu Lys Gln Ala Gln Arg Ser Phe Val Pro Pro Gln Gly Pro 200 Phe Pro Thr Ala Thr Gln Arg Glu Leu Gly Leu Glu Ala Met Lys Met 215 Leu Gly Phe Asp Phe Asn Gly Gly Arg Leu Asp Val Ser Ala His Pro 230 235 Phe Cys Gly Gly Val Pro Glu Asp Val Arg Ile Thr Thr Arg Tyr Asp 245 250 Glu Asp Glu Leu Leu Ser Ala Leu Phe Gly Val Ile His Glu Thr Gly His Ala Arg Tyr Glu Gln Asn Leu Pro Arg Ala Trp Ala Gly Gln Pro 280 Val Ala Leu Ala Arg Ser Thr Ala Ile His Glu Ser Gln Ser Leu Phe 295 Phe Glu Met Gln Leu Gly Arg Ser Asp Ala Phe Leu Lys His Leu Leu 310 315 Pro Ala Val His Ala Arg Phe Gly Ser Gln Ala Ala Phe Ser Glu Glu 330 325

Asn Phe Ile Ala Trp Asn Gln Arg Val Lys Pro Gly Tyr Ile Arg Val 345

Asp Ala Asp Glu Val Ser Tyr Pro Ala His Val Val Leu Arg Tyr Glu 360 Ile Glu Arg Ala Leu Ile Asn Gly Glu Ile Glu Val Asp Asp Ile Pro

Ala Leu Trp Asp Glu Lys Met Gln Ala Trp Leu Gly Leu Ser Thr Lys 390 395 Asp Asn Tyr Arg Asn Gly Cys Met Gln Asp Ile His Trp Thr Asp Gly 405 410 Gly Phe Gly Tyr Phe Pro Ser Tyr Thr Leu Gly Ala Met Tyr Ala Ala 420 425 430 Gln Leu Phe His Ala Ala Lys Thr Ala Leu Pro Gly Leu Gln Ile Ser 440 Ile Ala Gly Gly Asp Phe Ser Ala Leu Phe Asp Trp Leu Arg Gln Asn 455 460 Ile Trp Gln His Gly Ser Arg Phe Ser Thr Ser Gln Leu Ile Thr Gln 470 475 Ala Thr Gly Glu Asp Leu Asn Ile Arg Tyr Phe Arg Glu His Leu Thr 485 490 Ser Arg Tyr Leu

<210> 10233

<211> 487

<212> PRT

<213> Enterobacter cloacae

<400> 10233 Ile Pro Phe Pro Pro Asp Leu Pro Arg Arg His Ser Glu Tyr Asn Pro 10 Leu Pro Pro Ala Pro Val Arg Arg His Ser Ser Phe Pro Leu Asp Leu 20 Cys Tyr Gln Tyr Thr Ile Leu Tyr Ile Asn Thr Val Phe Ile Asn Gly 40 Asp His Asn Ala Val Phe His Pro Thr Trp Arg Tyr Gln Ser Glu Leu 5.5 Thr Met Phe Ala Leu Cys Asp Val Asn Ala Phe Tyr Ala Ser Cys Glu 70 75 Thr Val Phe Arg Pro Asp Leu Lys Gly Arg Pro Val Val Leu Ser 90 Asn Asn Asp Gly Cys Val Ile Ser Arg Ser Ala Glu Ala Lys Pro Phe 100 105 Val Lys Met Gly Glu Pro Tyr Phe Lys Gln Lys Asp Arg Phe Arg His 115 120 125 His Gly Val Val Cys Phe Ser Ser Asn Tyr Glu Leu Tyr Ala Asp Met 135 140 Ser Asn Arg Val Met Asn Thr Leu Glu Glu Met Ser Pro Arg Ser Glu 150 Ile Tyr Ser Ile Asp Glu Ile Phe Cys Asp Leu Thr Gly Val Arg Asn 165 170 175 Cys Arg Asp Leu Ser Asp Phe Gly His Glu Met Arg Ala Thr Val Leu 180 185 190 Gln Arg Thr His Leu Thr Val Gly Val Gly Ile Ala Pro Thr Lys Thr 200 Leu Ala Lys Leu Ala Asn His Ala Ala Lys Arg Trp Gln Leu Gln Thr 215 220 Gly Gly Val Val Asp Leu Ser Asn Val Asp Arg Gln Arg Lys Leu Met 230 235 Ala Ala Leu Pro Val Glu Asp Val Trp Gly Val Gly Arg Arg Ile Ala 245 250 Lys Lys Leu Glu Met Met Gly Ile Lys Thr Val Leu Gln Leu Ala Asp 265 Thr Asp Ile Arg Phe Ile Arg Lys His Phe Asn Val Val Leu Glu Arg 280 Thr Val Arg Glu Leu Arg Gly Glu Pro Cys Leu Glu Leu Glu Glu Phe

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Ala Pro Val Lys Gln Glu Ile Val Cys Ser Arg Ser Phe Gly Glu Arg
                                        315
                    310
Ile Thr Glu Tyr Asp Asp Val Arg Gln Ala Ile Cys Ser Tyr Ala Ala
                                    330
                325
Arg Ala Ala Glu Lys Leu Arg Asn Glu His Gln His Cys Arg Phe Ile
            340
                                345
                                                     350
Ser Val Phe Val Lys Thr Ser Pro Phe Ala Leu Asn Glu Pro Tyr Tyr
                            360
Gly Asn Ser Ala Ser Val Lys Leu Leu Thr Pro Thr Gln Asp Ser Arg
                        375
                                             380
Asp Ile Ile Gly Ala Ser Val Arg Cys Leu Asp Ala Val Trp Lys Asn
                    390
                                        395
Gly His Arg Tyr Gln Lys Ala Gly Val Met Leu Gly Asp Phe Tyr Ser
                                    410
Gln Gly Val Ala Gln Leu Asn Leu Phe Asp Asp Asn Ala Pro Arg Lys
            420
                                425
Asn Gly Gln Lys Leu Met Asp Val Leu Asp His Leu Asn Ala Glu Asn
        435
                            440
                                                 445
Gly Arg Gly Thr Leu Tyr Phe Ala Gly Gln Gly Ile Gln Gln Pro Trp
                        455
                                            460
Gln Met Lys Arg Glu Met Leu Ser Pro Arg Tyr Thr Thr Arg Phe Ala
                                         475
                    470
Asp Leu Leu Thr Val Lys
                485
<210> 10234
<211> 332
<212> PRT
<213> Enterobacter cloacae
<400> 10234
Pro Cys Thr Phe Pro Thr Ala Asn Arg Ser Ala Arg His Pro Cys Gly
                                    10
His Phe Cys Leu Thr Trp Pro Ile Phe Met Phe Ile Lys Val Leu
            20
                                25
Gly Ser Ala Ala Gly Gly Gly Phe Pro Gln Trp Asn Cys Asn Cys Ala
                            40
                                                 45
Asn Cys Gln Gly Leu Arg Asp Gly Thr Leu Gln Ala Thr Pro Arg Thr
    50
                        55
Gln Ser Ser Ile Ile Val Ser Asp Lys Gly Lys Glu Trp Val Leu Cys
                    70
                                        75
                                                             80
Asn Ala Ser Pro Asp Ile Ser Gln Gln Ile Ala His Thr Pro Glu Leu
                85
                                     90
Asn Lys Lys Glu Val Leu Arg Gly Thr His Ile Gly Gly Ile Ile Leu
            100
                                105
Thr Asp Ser Gln Ile Asp His Thr Thr Gly Leu Leu Ser Leu Arg Glu
                            120
Gly Cys Pro His Gln Val Trp Cys Thr Pro Glu Val His Glu Asp Leu
                        135
Ser Ser Gly Phe Pro Ile Phe Thr Met Leu Arg His Trp Asn Gly Gly
                    150
                                        155
Leu Ile His His Pro Ile Ala Pro Leu Thr Ala Phe Ser Val Glu Ala
                                    170
                165
Cys Pro Asp Leu Gln Phe Thr Ala Val Pro Ile Ala Ser Asn Ala Pro
            180
                                185
                                                     190
Pro Tyr Ser Pro Trp Arg Asp His Pro Leu Pro Gly His Asn Val Ala
                            200
                                                 205
Leu Phe Ile Glu Asn Arg Arg Asn Gly Gln Thr Leu Phe Tyr Ala Pro
                        215
                                            220
Gly Leu Gly Glu Pro Asp Asp Ala Ile Leu Pro Trp Leu Lys Lys Ala
```

230

5708

Asp Cys Leu Ile Asp Gly Thr Val Trp Gln Asp Asp Glu Leu Gln 245 250 Ala Thr Gly Val Gly Arg Asn Thr Gly Arg Asp Met Gly His Leu Ala 260 265 Leu Gly Asp Glu His Gly Met Met Ala Leu Leu Ala Ser Leu Pro Ala 275 280 285 Lys Arg Lys Ile Leu Ile His Ile Asn Asn Thr Asn Pro Ile Leu Asn 295 300 Glu Gln Ser Pro Gln Arg His Ala Leu Ala Gln Gln Gly Ile Glu Val 310 315 Ser Trp Asp Gly Met Asn Ile Thr Leu Gln Asp

<210> 10235

<211> 403

<212> PRT

<213> Enterobacter cloacae

<400> 10235

Arg Arg Ala Leu Pro Leu Pro Arg Trp Ser Gly Phe Tyr Gly Ala Cys 10 Cys Ala Cys Ala Ser Pro Pro Val Trp Pro Leu Arg Thr Pro Leu Ala 20 25 Thr Ser Asn Asp Tyr Phe Ser Gly Glu Val Met Ser Gln Gln Asp Ala 40 Ala Lys Glu Gln Ala Asn Thr Arg Lys Asn Val Arg Val Val Ser Ile 55 60 Phe Thr Ala Ala Ile Gly Ile Val Gly Val Leu Val Ile Leu Tyr 70 7.5 Ala Trp Gln Leu Pro Pro Phe Thr Arg His Ala Gln Phe Thr Asp Asn 85 90 Ala Tyr Val Arg Gly Gln Thr Thr Phe Ile Ser Pro Gln Val Asn Gly 100 105 Tyr Ile Thr Glu Val His Val Gln Asp Phe Ala Gln Val Lys Lys Gly 120 Glu Leu Leu Gln Ile Asp Asp Arg Ile Tyr Arg Gln Arg Val His 135 140 Gln Ala Glu Ala Gln Leu Ala Met Lys Ile Ala Ala Leu Asn Asn Asn 150 155 Leu Gln Gln Arg Arg Ser Ala Glu Ala Val Ile Ala Lys Asn Glu Ala 165 170 Ala Leu Lys Asn Ala Arg Ala Gln Ser Leu Lys Thr Gln Ala Asp Leu 185 Lys Arg Val Lys Glu Leu Thr Ala Asp Gly Ser Leu Ser Ile Arg Glu 200 Arg Asp Ser Ala Leu Ala Ser Ala Ala Gln Gly Ser Ala Asp Ile Asp 215 220 Gln Ala Lys Ala Thr Leu Glu Met Ser Arg Gln Asp Leu Gln Thr Val 235 230 Ile Val Asn Arg Gly Ser Leu Glu Ala Asp Val Glu Asn Ala Lys Ala 245 250 255 Ala Leu Glu Leu Ala Gln Ile Asp Leu Gln Asn Thr Arg Ile Val Ala 260 265 270 Pro Arg Asp Gly Gln Leu Gly Gln Ile Ala Val Arg Leu Gly Ala Tyr 280 285 Val Ala Ala Gly Thr His Leu Thr Thr Leu Val Pro Pro Gln His Trp 295 300 Val Ile Ala Asn Ile Lys Glu Thr Gln Leu Ala Asn Leu Arg Val Gly 310 315

Gln Pro Val Lys Phe Thr Val Asp Ala Leu Asn Asp Lys Ala Tyr Gln

Gly Arg Val Glu Ser Ile Ser Pro Ala Thr Gly Val Glu Phe Ser Ala.

340

Ile Thr Pro Asp Asn Ala Thr Gly Asn Phe Val Lys Ile Ala Gln Arg
355

Ile Pro Val Arg Ile Glu Val Leu Gly Glu Pro Glu Ala Tyr Arg Leu
370

Leu Arg Pro Gly Met Ser Val Gln Val Thr Ile Asp Thr Arg Glu Ala
385

Lys Gln

<210> 10236 <211> 286 <212> PRT <213> Enterobacter cloacae

<400> 10236

Arg Tyr Arg Leu Arg Pro Gly Ser Gly Tyr Gln Ser Ala Val Arg Arg 10 Glu Ser Arg Tyr Arg Gln Pro Gly Arg Cys Leu Arg Ser Pro Pro Leu 20 25 Thr Ala Arg Trp Glu Gly Phe Ser Phe Pro Ala Tyr Phe Val Ser Ser 40 Ala Pro Thr Leu Gln Pro Gly Gly Leu Met Ser Val Ile Ile Asp Thr 55 Phe Ile Ala Pro Pro Cys His Asp Asp Ile Glu Ile Leu Trp Gln Asp 70 Glu His Leu Leu Ile Asn Lys Pro Ser Gly Leu Leu Ser Leu Ser 90 Gly Lys Asn Pro Gln Asn Arg Asp Ser Val His His Arg Leu Val Gln 105 100 110 Thr Phe Pro Gly Cys Thr Leu Val His Arg Leu Asp Phe Gly Thr Ser 120 Gly Leu Met Val Ile Ala Arg Asn Lys Ala Ile Asn Ala Ala Leu Cys 135 140 His Gln Phe Ser Gln Arg Ala Val Ser Lys Val Tyr Thr Ala Leu Leu 150 155 Cys Gly His Val Glu Gln Asp Glu Gly Thr Val Asp Ala Pro Ile Ala 170 Lys Asp Gln Ala Leu Phe Pro Leu Met Thr Ile Cys Ala Arg Thr Gly 185 Lys Pro Ala Arg Ser Arg Tyr Arg Val Met Glu Arg Ile Tyr Gln Asp 200 Thr Thr Met Pro Leu Thr Arg Val Glu Leu Thr Pro Glu Thr Gly Arg 215 Thr His Gln Leu Arg Ile His Cys Gln Gln Leu Gly His Pro Ile Leu 230 235 Gly Cys Asp Leu Tyr Gly Gly Leu Glu Trp Pro Gly Ala Glu Glu Thr 245 250 Pro Arg Leu Met Leu His Ala Ser Val Leu Asn Phe Ile His Pro Leu 265 Ser Gly Glu Thr Ile Asn Ala Cys His Ala Ala Pro Phe 280

<210> 10237

<211> 347

<212> PRT

<213> Enterobacter cloacae

<400> 10237

Lys Val Leu Leu Met Lys Thr Leu Leu Pro Thr Ser Thr Ala Gly Ser



5710

1				5					10					15	
Leu	Pro	Lys	Pro 20	Thr	Trp	Leu	Ala	Gln 25	Pro	Glu	Thr	Leu	Trp	Ser	Pro
Trp	Lys	Leu 35	Gln	Asp	Glu	Glu	Leu 40	Leu	Ala	Gly	Lys	Gln 45	Asp	Ala	Leu
Arg	Leu 50	Ser	Leu	Asp	Glu	Gln 55	Ile	Arg	Ala	Gly	Ile 60	Asp	Ile	Val	Ser
Asp 65	Gly	Glu	Gln	Thr	Arg 70	Gln	His	Phe	Val	Thr 75	Thr	Phe	Ile	Glu	His 80
Leu	Ser	Gly	Val	Asp 85	Phe	Glu	Asn	Arg	Gln 90	Thr	Val	Arg	Ile	Arg 95	Asn
Arg	Tyr	Asp	Ala 100	Ser	Val	Pro	Thr	Val 105	Val	Asp	Ala	Val	Ala 110	Arg	Gln
Lys	Pro	Val 115	Phe	Val	Asp	Asp	Ala 120	Lys	Tyr	Leu	Arg	Gln 125	Leu	Thr	Asp
Lys	Pro 130	Ile	Lys	Trp	Ala	Leu 135	Pro	Gly	Pro	Met	Thr 140	Met	Ile	Asp	Thr
Leu 145	Tyr	Asp	Ala	His	Tyr 150	Lys	Ser	Arg	Glu	Lys 155	Leu	Ala	Trp	Glu	Phe 160
Ala	Lys	Ile	Leu	Asn 165	Gln	Glu	Ala	Arg	Glu 170	Leu	Glu	Ala	Ala	Gly 175	Val
Asp	Ile	Ile	Gln 180	Phe	Asp	Glu	Pro	Ala 185	Phe	Asn	Val	Phe	Phe 190	Asp	Glu
Val	Asn	Asp 195	Trp	Gly	Ile	Ala	Ala 200	Leu	Glu	Arg	Ala	Ile 205	Glu	Gly	Leu
Lys	Cys 210	Glu	Thr	Ala	Val	His 215	Ile	Cys	Tyr	Gly	Tyr 220	Gly	Ile	Lys	Ala
Asn 225	Thr	Asp	Trp	Lys	Lys 230	Thr	Leu	Gly	Ser	Glu 235	Trp	Arg	Gln	Tyr	Glu 240
Glu	Ala	Phe	Pro	Lys 245	Leu	Gln	Thr	Ser	Lys 250	Ile	Asp	Ile	Ile	Ser 255	Leu
Glu	Cys	His	Asn 260	Ser	Arg	Val	Pro	Met 265	Asp	Leu	Leu	Glu	Leu 270	Ile	Arg
Gly	Lys	Lys 275	Val	Met	Val	Gly	Ala 280	Ile	Asp	Val	Ala	Thr 285	Gln	Thr	Ile
Glu	Thr 290	Pro	Glu	Glu	Val	Ala 295	Asp	Thr	Leu	Arg	Lys 300	Ala	Leu	Gln	Phe
Val 305	Asp	Ala	Asp	Lys	Leu 310	Tyr	Pro	Ser	Thr	Asn 315	Cys	Gly	Met	Ala	Pro 320
Leu	Ser	Arg	Gln	Val 325	Ala	Asn	Gly	Lys	Leu 330	Lys	Ala	Leu	Ser	Ala 335	Gly
Ala	Asp	Ile	Ile 340	Arg	Arg	Glu	Leu	Ala 345	Arg					•	

<210> 10238

<211> 834

<212> PRT

<213> Enterobacter cloacae

<400> 10238

 Arg Trp Trp Arg Arg Ala Ser Arg Val Thr Ser Asp Thr Pro Leu Ser Cys

 1
 5
 10
 15

 Arg Val Ser Leu Arg Leu Pro Gly Leu Gln Leu Pro Asp Arg Gly Cys
 20
 25
 30

 Asp Ala Pro Pro Leu Phe Phe Asn Leu Ala Arg Leu Thr Asn Asn Leu
 45

 Ala Asp Ala Gly Lys Arg Phe Ser Cys Ala Pro Val Arg Ile Thr Leu
 55
 60

 Thr Leu His Asn Lys His Asn Lys Met Arg Ser Ala Met Gly Ser Asn
 70
 75
 80

 Ser Ser Phe Ser Ala Arg Arg Thr Ala Leu Ala Met Ala Val Ala Leu

85 90 Cys Cys Ala Trp Gln Ser Pro Val Tyr Ala His Gly Ser Glu Ala His 100 105 Met Val Pro Met Asp Lys Thr Leu Gln Ala Phe Gly Ala Asp Val Gln 120 125 Trp Asp Asp Tyr Ala Gln Met Phe Thr Ile Val Lys Asp Gly Ala Phe 135 140 Val Lys Val Lys Pro Gly Ala Asn Thr Ala Ile Val Asn Gly Lys Pro 150 155 Leu Thr Leu Gln Val Pro Val Val Met Lys Asn Asn Lys Ala Phe Ile 170 165 Pro Glu Thr Phe Ile Asn Asp Val Phe Gln Ser Gly Leu Asp Gln Thr 185 Phe Gln Val Glu Lys Ser Pro His Pro Leu Asn Ala Leu Thr Ala Asp 200 205 Glu Ile Asn Gln Ala Val Ala Ile Val Lys Ala Ser Ala Asp Phe Lys 215 220 Pro Asn Thr Arg Phe Thr Gln Ile Ala Leu Ala Glu Pro Glu Lys Ala 230 235 Lys Val Trp Asp Phe Val Leu Asn Gly Thr Ala Val Asp Ala Pro Arg 250 245 Gln Ala Asn Ile Ile Met Leu Asp Gly Lys His Ile Ile Glu Ser Arg 260 265 270 Val Asp Leu Lys Glu Lys Lys Ile Leu Arg Trp Glu Pro Ile Lys Asp 275 280 285 Ala His Gly Met Val Leu Leu Asp Asp Phe Asn Thr Val Gln Gln Ile 295 300 Ile Asn Glu Ser Pro Glu Phe Ala Ala Val Leu Lys Lys Arg Gly Ile 310 315 Thr Asp Pro Lys Lys Val Ile Thr Thr Pro Leu Thr Val Gly Phe Phe 325 330 335 Asp Gly Lys Asp Gly Leu Lys Gln Glu Asp Arg Leu Leu Lys Val Ile 340 . 345 Ser Tyr Leu Asp Val Gly Asp Gly Asn Tyr Trp Ala His Pro Ile Glu 360 Asn Leu Val Ala Val Val Asp Leu Glu Gln Lys Lys Ile Gln Lys Ile 375 Glu Glu Gly Pro Val Val Pro Val Pro Leu Thr Pro Arg Pro Tyr Asp 390 395 Gly Arg Asp Arg Val Glu Thr Val Lys Lys Pro Leu Glu Ile Ile Glu 410 Pro Glu Gly Lys Asn Tyr Thr Ile Thr Gly Asp Arg Val His Trp Gln 420 425 Asn Trp Asp Phe His Leu Ser Leu Asp Ser Arg Val Gly Pro Ile Ile 435 440 445 Ser Thr Val Thr Tyr Asn Asp Asn Gly Lys Lys Arg Gln Val Met Tyr 455 460 Gln Gly Ser Leu Gly Gly Met Ile Val Pro Tyr Gly Asp Pro Asp Ile 470 475 Gly Trp Tyr Phe Lys Ala Tyr Leu Asp Ser Gly Asp Tyr Gly Met Gly 485 490 Thr Leu Thr Ser Pro Leu Val Arg Gly Lys Asp Val Pro Ser Asn Ala 500 505 510 Val Met Leu Asn Glu Thr Ile Pro Asp Tyr Thr Gly Ala Pro Met Glu 520 525 Ile Pro Arg Ala Ile Ala Ile Phe Glu Arg Tyr Ala Gly Pro Glu Tyr 535 540 Lys His Gln Glu Leu Gly Lys Pro Asn Val Ser Thr Glu Arg Arg Glu 550 555 Leu Val Val Arg Trp Val Ser Thr Val Gly Asn Tyr Asp Tyr Ile Phe 565 570

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Asp Trp Val Phe His Glu Asn Gly Thr Ile Gly Ile Asp Ala Gly Ala
            580
                               585
Thr Gly Ile Glu Ala Val Lys Gly Val Gln Thr Lys Thr Met His Asp
                           600
Ala Thr Ala Lys Asp Asp Thr Arg Tyr Gly Thr Leu Ile Asp His Asn
                        615
                                            620
Ile Val Gly Thr Thr His Gln His Ile Tyr Asn Phe Arg Leu Asp Met
                                        635
                    630
Asp Val Asp Gly Ile Asn Asn Lys Leu Val Ala Met Asp Pro Asp Val
                645
                                    650
Lys Pro Asn Thr Ala Gly Gly Pro Arg Thr Ser Thr Met Gln Val Asn
                                665
            660
Gln Tyr Asp Ile Asp Thr Glu Gln Gln Ala Ala Gln Lys Phe Asp Pro
                            680
        675
Gly Thr Ile Arg Leu Leu Ser Asn Thr Ser Lys Glu Asn Arg Met Gly
                        695
                                            700
Asn Pro Val Ser Tyr Gln Ile Ile Pro Tyr Ala Gly Gly Thr His Pro
                    710
                                        715
Val Ala Ser Gly Ala Lys Phe Ala Pro Asp Glu Trp Ile Tyr His Arg
                725
                                    730
Leu Ser Phe Met Asp Lys Gln Leu Trp Val Thr Arg Tyr His Pro Asp
            740
                                745
Glu Met Tyr Pro Glu Gly Lys Tyr Pro Asn Arg Ser Thr His Asp Thr
                            760
Gly Leu Gly Gln Tyr Ser Lys Asp Asn Glu Ser Leu Asn Asp Gln Asp
                        775
                                            780
Asn Val Ile Trp Met Thr Thr Gly Thr Thr His Val Ala Arg Ala Glu
                    790
                                        795
Glu Trp Pro Ile Met Pro Thr Glu Trp Val His Thr Leu Leu Lys Pro
                                    810
Trp Asn Phe Phe Asp Glu Thr Pro Thr Leu Gly Lys Lys Glu Gln
                                825
Lys
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```
<210> 10239
<211> 679
<212> PRT
<213> Enterobacter cloacae
```

<400> 10239

His Thr Phe Thr Arg Ile Arg Ser Leu His Lys Gln Arg His Ser Leu 10 Leu Arg Gly Phe Arg Met Arg Ile Asn Glu Ile Val Arg Ser Leu Ala 25 Leu Ala Gly Cys Phe Ile Ser Thr Ser Ser Ala Trp Ala Ala Glu Ala 40 Pro Lys Asp Ala Ser Ala Ala Thr Gln Gln Ala Asn Asn Ala Leu Phe 55 60 Asn Gln Leu Pro Phe Ser Asp Asn Thr Asp Phe Thr Asn Ala His Lys 70 75 Gly Phe Ile Ala Pro Leu Pro Gln Glu Ile Ile Lys Gly Glu Gln Gly 90 Asn Thr Val Trp Asp Pro Gln Gln Tyr Ala Phe Ile Lys Glu Gly Asp 105 Lys Ala Pro Asp Ser Val Asn Pro Ser Leu Trp Arg Gln Ser Gln Leu 120 Ile Asn Ile Ser Gly Leu Phe Glu Val Thr Glu Gly Val Tyr Gln Ile 135 140 Arg Asn Leu Asp Leu Ser Asn Met Thr Ile Ile Glu Gly Lys Glu Gly 150

Ile Thr Val Val Asp Pro Leu Val Ser Ala Glu Thr Ala Lys Val Gly 165 170 Met Asp Leu Tyr Tyr Lys Asn Arg Gly Asn Lys Pro Val Val Ala Val 180 185 Ile Tyr Thr His Ser His Val Asp His Tyr Gly Gly Val Arg Gly Val 200 Val Asp Glu Ala Asp Val Lys Ser Gly Lys Val Lys Val Tyr Ala Pro 215 Ala Gly Phe Met Glu Ala Ala Val Ala Glu Asn Ile Met Ala Gly Asn 230 235 Val Met Ser Arg Arg Ala Ser Tyr Met Tyr Gly Asn Leu Leu Lys Pro 245 250 Asp Ala Lys Gly Gln Val Gly Ala Gly Phe Gly Thr Thr Thr Ser Ala 260 265 Gly Thr Val Thr Leu Ile Ala Pro Thr Asn Ile Ile Glu Lys Asp Gly 280 Gln Lys Glu Val Ile Asp Gly Leu Thr Tyr Asp Phe Met Leu Ala Pro 295 300 Gly Ser Glu Ala Pro Ser Glu Met Leu Trp Tyr Ile Glu Glu Lys Lys 310 315 Leu Ile Glu Ser Ala Glu Asp Val Thr His Thr Leu His Asn Thr Tyr 325 330 Ser Leu Arg Gly Ala Lys Ile Arg Glu Pro Leu Pro Trp Ser Lys Tyr 340 345 Ile Asn Gln Ala Ile Val Arg Trp Gly Asp Lys Ala Glu Val Ile Met 360 Ala Gln His His Trp Pro Thr Trp Gly Asn Glu Asn Val Val Asn Leu 375 Leu Lys Ser Gln Arg Asp Leu Tyr Arg Tyr Ile Asn Asp Gln Thr Leu 390 395 Arg Met Ala Asn Glu Gly Leu Thr Arg Asp Glu Ile Ala Ala Asn Phe 405 410 Lys Leu Pro Asn Ser Leu Ala Asn Thr Trp Ala Asn Arg Gly Tyr Tyr 425 Gly Ser Val Ser His Asp Val Lys Ala Thr Tyr Val Leu Tyr Leu Gly 440 Trp Phe Asp Gly Asn Pro Ala Thr Leu Asp Glu Leu Pro Pro Glu Glu 455 Ala Ala Lys Lys Phe Val Glu Tyr Met Gly Gly Ala Asp Ala Ile Leu 470 475 Ser Lys Ala Lys Thr Asp Phe Asp Gln Gly Asn Tyr Arg Trp Val Ala 485 490 Gln Val Val Ser Lys Val Val Phe Ala Asp Pro Asn Asn Gln Ala Ala 505 510 Arg Asn Leu Glu Ala Asp Ala Leu Glu Gln Leu Gly Tyr Gln Ala Glu 520 525 Ser Gly Pro Trp Arg Asn Phe Tyr Leu Thr Gly Ala Gln Glu Leu Arg 535 540 Asn Gly Val Val Lys Gly Pro Thr Pro Asn Thr Ala Ser Pro Asp Thr 550 555 Val Arg Ala Met Thr Pro Glu Met Phe Phe Asp Tyr Leu Ala Val His 570 565 Ile Asn Gly Glu Lys Ala Ala Asp Ala Lys Ser Val Phe Asn Ile Asp 580 585 Leu Gly Ser Asp Gly Gly Lys Tyr Lys Leu Glu Leu Glu Asn Gly Val 600 Leu Asn His Thr Ala Asn Ala Glu Ala Lys Asp Ala Asp Ala Thr Val 615 620 Thr Leu Asn Arg Asp Thr Leu Asn Lys Ile Ile Leu Lys Glu Val Thr 630 635 Leu Arg Gln Ala Gln Asp Asn Gly Asp Ile Lys Val Thr Gly Asp Ala

Arg

645 650 Ala Lys Leu Asp Ala Met Leu Gly Tyr Met Asp Lys Phe Glu Phe Trp 660 665 Phe Asn Ile Val Thr Pro 675 <210> 10240 <211> 386 <212> PRT <213> Enterobacter cloacae <400> 10240 Arg Gln His Ser Arg Ala Glu Val Pro Pro Ala Gln Gly Lys Phe Ser Ser Met Glu Lys Arg His Pro Ala Thr Pro Glu Pro Ala Thr Trp Pro 20 25 Thr Arg Lys Ser Met Val Val His Gly Leu Ala Val Asn Leu Pro Trp 35 40 Leu Ala Phe Val Asn Ala Ser Phe Ala Leu Met Val Leu Leu Arg Asn 55 Ser Leu Phe Gly His Ile Asp Ala Leu Leu His Ile Ser Pro Pro Leu 70 75 Arg Gln Met Ile Asp Ala Ser Met Leu Gly Val Val Ile Leu Ser Val 90 85 Ala Leu Val Ile Met Ala Trp Arg His Ile Arg Gly Val Ser Ala Val 100 105 Leu Phe Met Cys Ser Leu Leu Trp Ser Ile Ser Cys Tyr Trp Phe Ile 120 115 125 Asn Val Leu His Leu Pro His Pro Trp Pro Ile Phe Val Thr Leu Leu 135 140 Met Ala Gly Met Thr Ala Leu Tyr Phe His Pro Val Ala Leu Leu Cys 150 155 Phe Thr Val Pro Leu Trp Ile Ser Leu Pro Val Ala Ser Met Leu Leu 165 170 Asn Gln Glu Ile Asn Tyr Arg Phe Ala Gly Leu Trp Val Val Phe Thr 180 185 190 Phe Ile Leu Val Cys Gly Arg Tyr Ile Leu Leu Ser Trp Phe Glu Glu 200 195 205 Ala Trp Arg Arg Asn Gln Gln Asn Gln Arg Leu Ile Ser Arg Leu Asp 215 220 Ala Leu Ala His Gln Asp Pro Leu Thr Lys Thr Ala Asn Arg Arg Ala 230 235 Met Glu Leu Val Leu Glu Asn Ala Val Glu Gln Gly Lys Arg Phe Ala 250 Val Leu Met Leu Asp Val Asp Tyr Phe Lys Leu Tyr Asn Asp Thr Tyr . 265 Gly His Gln Ala Gly Asp Ala Cys Leu Ala Arg Val Ala Glu Val Leu 280 Asn Thr Ser Val Arg Thr Pro Glu Asp Val Val Ser Arg Tyr Gly Gly 295 Glu Glu Phe Val Val Ile Leu Phe Asp Cys Glu Glu Ser Val Ala Glu 310 315 Lys Val Ala Ala Arg Ile Gln Ala Gly Leu Arg Thr Ala Ala Ile Ala 330 325 His Ser Ala Ser Lys Val Ser Glu Cys Val Thr Val Ser Met Gly Ile 345 340 Ala Gly Tyr Thr Ala Gly Leu Ala Gly Pro Glu Ile Ile Ala Arg Ala 360 Asp Ala Ala Leu Tyr Arg Ala Lys Glu Ala Gly Arg Asp Arg Trp Ser 375

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385
<210> 10241
<211> 146
<212> PRT
<213> Enterobacter cloacae
<400> 10241
Phe Arg Lys Leu Pro Val Ile Ser Pro Ser Ile Thr His Ala Gly Ser
Ala Ser Phe Ser Thr Met Ala Gly Phe Leu Pro Pro Ser Ser Val
                                25
Thr Pro Val Ser Val Ser Ala Ala Thr Arg Ala Ile Cys Leu Pro Val
Ala Val Glu Pro Val Lys Leu Thr Leu Ala Met Arg Gly Cys Glu Val
                        55
Ser Ala Ala Pro Gln Thr Ala Pro Leu Pro Val Thr Thr Leu Asn Thr
                    70
                                        75
Pro Ser Gly Ile Pro Ala Ser Leu Ala Ser Ser Ala Thr Arg Asn Arg
                                    90
                85
Val Ser Gly Val Val Ser Glu Gly Leu Ile Thr Met Glu Gln Pro Ala
            100
                                105
Ala Ser Ala Gly Ile Thr Phe His Met Pro Ile Ile Ser Gly Lys Phe
                            120
His Gly Thr Ile Pro Ala Thr Thr Pro Thr Gly Ser.Leu Arg Val His
                        135
Ala
145
<210> 10242
<211> 317
<212> PRT
<213> Enterobacter cloacae
<400> 10242
Met Gln Gln Cys Glu Asn Ser Asp Gly Ala Ala Arg Thr Ser Met Ala
                                    10
Cys Ala Ser Glu Gln Asp Asn Phe Gln Gln Trp Leu Ala Gln Ile Asn
Gln Val Cys Gly Arg Phe Ala Ala Arg Pro Leu Glu Gly Ala Phe Leu
        35
Gly Glu Leu Glu Thr Ser Tyr Thr Gln Ser Leu Lys Leu Ser Thr Val
                        55
Thr Ala Ala Gly Val Asn Leu Phe Arg Thr Arg Gln Glu Ile Lys Asn
                    70
Gly Asn Asp Ala Trp Phe Tyr Thr Val Phe Gln Leu Glu Gly Ser Ala
                                    90
Gly Ile Glu Gln Asp Asn Gln Arg Ala Met Leu Lys Ala Gly Asp Ile
                                105
                                                    110
Thr Leu Ile Asp Ala Ser Arg Pro Cys Ser Ile Tyr Trp Gln Glu Arg
                            120
                                                125
Ser Arg Gln Ile Ser Leu Leu Leu Pro Arg Gln Ile Ile Glu Gln His
                        135
                                            140
Ala Arg Phe Gln Glu Val Arg Cys Ala Leu Pro Leu Ser Ser Leu
                    150
                                        155
Pro Thr Val Gln Leu Ser Tyr Arg Leu Leu Gln Glu Ser Met Gly Asn
                                    170
                165
Ala Asp Leu Ser Ala Ser Glu Ser Glu Ala Ala Leu Glu Ala Met Val
```

185 Cys Leu Leu Arg Pro Ala Phe Gln Gln His Glu Val Leu Pro Arg 200

```
Lys Glu Arg Gln Phe Arg His Val Leu Ser Leu Ile Asp Asp His Ile
                        215
                                            220
Gln Ser Glu Ala Leu Arg Pro Glu Trp Ile Ala Ser Glu Ser Gly Met
                    230
                                        235
Ser Val Arg Ser Leu Tyr Arg Met Phe Ala Gly Lys Gly Leu Val Val
                                    250
                245
Ala Gln Tyr Ile Lys Asn Arg Arg Leu Asp Leu Cys Ala Gln Ala Leu
                                265
                                                     270
Arg Ser Ile Ser Asp Asp Glu Lys Leu Ala Gly Ile Gly Tyr Ser Trp
                            280
                                                 285
Gly Phe Thr Asp His Ser His Phe Ser Thr Ala Phe Lys Gln Arg Phe
                        295
Gly Val Ser Pro Gly Glu Tyr Arg Lys Arg Tyr Arg
                    310
<210> 10243
<211> 340
<212> PRT
<213> Enterobacter cloacae
<400> 10243
Arg Gly Ser Lys Ile Thr Gly Glu Ser Leu Met Lys Leu Ala Val Tyr
                                    10
Ser Thr Lys Gln Tyr Asp Lys Lys Tyr Leu Gln His Val Asn Glu Thr
            20
                                25
Tyr Gly Phe Asp Leu Glu Phe Phe Asp Phe Leu Leu Thr Glu Lys Thr
        35
Ala Lys Thr Ala His Gly Cys Glu Gly Val Cys Ile Phe Val Asn Asp
                        55
   50
Asp Gly Ser Arg Pro Val Leu Glu Glu Leu Lys Lys Gln Gly Val Lys
                    70
                                        75
Tyr Ile Ala Leu Arg Cys Ala Gly Phe Asn Asn Val Asp Leu Asp Ala
                                    90
Ala Lys Glu Leu Gly Leu Lys Val Val Arg Val Pro Ala Tyr Ser Pro
            100
                                105
                                                     110
Glu Ala Val Ala Glu His Ala Val Gly Met Met Met Ser Leu Asn Arg
                            120
Arg Ile His Arg Ala Tyr Gln Arg Thr Arg Asp Ala Asn Phe Ser Leu
                        135
Glu Gly Leu Thr Gly Phe Thr Met Tyr Gly Lys Thr Ala Gly Val Ile
                    150
                                         155
Gly Thr Gly Lys Ile Gly Val Ala Ala Leu Arg Ile Leu Lys Gly Phe
                                    170
Gly Met Arg Leu Leu Ala Phe Asp Pro Tyr Pro Ser Ala Ala Ala Leu
                                185
Glu Leu Gly Val Glu Tyr Val Asp Leu Lys Thr Leu Phe Ser Gln Ser
        195
                            200
Asp Val Ile Ser Leu His Cys Pro Leu Thr Pro Glu Asn Tyr His Leu
                        215
                                             220
Leu Asn Gln Ser Ala Phe Asp Gln Met Lys Asp Gly Val Met Ile Ile
                    230
                                        235
Asn Thr Ser Arg Gly Gly Leu Ile Asp Ser Gln Ala Ala Ile Glu Ala
                245
                                    250
Leu Lys Thr Gln Lys Ile Gly Ala Leu Gly Met Asp Val Tyr Glu Asn
                                                     270
                                265
            260
Glu Arg Asp Leu Phe Phe Glu Asp Lys Ser Asn Asp Val Ile Gln Asp
        275
                            280
Asp Val Phe Arg Arg Leu Ser Ala Cys His Asn Val Leu Phe Thr Gly
                        295
                                            300
His Gln Ala Phe Leu Thr Ala Glu Ala Leu Ile Ser Ile Ser Glu Thr
```

310

330

Thr Leu Gly Asn Leu Gln Gln Leu Asp Lys Gly Glu Ala Cys Pro Asn

Ala Ile Val

<210> 10244

```
<211> 280
<212> PRT
<213> Enterobacter cloacae
<400> 10244
Asn Met Ala Phe Val Thr Thr Lys Asp Gly Val Ser Ile Tyr Tyr Lys
                                    10
Asp Trp Gly Pro Lys Asp Ala Gln Pro Ile Val Phe His His Gly Trp
            20
Pro Leu Ser Ala Asp Asp Trp Asp Asn Gln Met Leu Phe Phe Leu Ala
                            40
Glu Gly Phe Arg Val Ile Ala Leu Asp Arg Arg Gly His Gly Arg Ser
Asp Gln Val Ser Glu Gly His Asp Met Asp His Tyr Ala Ser Asp Ala
                    70
                                        75
Ser Ala Val Val Glu Ser Leu Asp Leu Arg Asn Ala Val His Val Gly
                                    90
His Ser Thr Gly Gly Gln Val Ala Arg Tyr Val Ala Lys Tyr Gly
            100
                                105
Gln Pro Gln Gly Arg Val Ala Lys Ala Val Leu Val Ser Ala Val Pro
                            120
Pro Leu Met Val Lys Ser Asp Thr Asn Pro Gly Gly Thr Pro Ile Glu
                        135
                                            140
Val Phe Asp Gly Phe Arg Gln Ala Leu Ala Ala Asn Arg Ala Gln Phe
                    150
Tyr Leu Asp Val Ala Ser Gly Pro Phe Tyr Gly Phe Asn Arg Asp Gly
                                    170
                165
Ala Glu Val Ser Gln Gly Thr Ile Gln Asn Trp Trp Arg Gln Gly Met
            180
                                185
Ile Gly Ser Ala Lys Ala His Tyr Glu Gly Ile Lys Ala Phe Ser Glu
        195
                            200
Thr Asp Gln Thr Asp Asp Leu Lys Ala Ile Thr Val Pro Val Leu Val
                        215
                                            220
Leu Gln Gly Asp Asp Gln Val Val Pro Tyr Lys Asn Ala Ala Leu
                    230
                                        235
Leu Gln Asp Lys Leu Leu Ala Asn Ser Glu Leu Lys Ile Tyr Pro Gly
                                    250
                245
Phe Pro His Gly Met His Thr Thr His Ala Asp Thr Ile Asn Ala Asp
                                265
            260
Ile Leu Thr Phe Ile Arg Ser
                            280
<210> 10245
<211> 232
<212> PRT
<213> Enterobacter cloacae
<400> 10245
Leu Glu Val Ser Met Cys Gly Arg Phe Ala Gln Ala Gln Thr Arg Glu
Glu Tyr Leu Ala Tyr Leu Ala Asp Glu Gly Glu Arg Asp Ile Ala Tyr
                                25
Asp Pro Glu Pro Ile Gly Arg Tyr Asn Val Ala Pro Gly Thr Lys Val
Leu Leu Ser Glu Arg Asp Lys Gln Leu His Leu Asp Pro Val Phe
```

60 55 Trp Gly Tyr Ala Pro Gly Trp Trp Asp Lys Ala Pro Leu Ile Asn Ala 70 75 Arg Val Glu Thr Ala Ala Thr Ser Arg Met Phe Lys Pro Leu Trp Gln 85 90 His Gly Arq Ala Ile Cys Phe Ala Asp Gly Trp Phe Glu Trp Lys Lys 105 Glu Gly Asp Lys Lys Gln Pro Tyr Phe Ile His Arg Ala Asp Gly Gln 120 Pro Ile Phe Met Ala Ala Ile Gly Ser Thr Pro Phe Glu Arg Gly Asp 135 Glu Ala Glu Gly Phe Leu Ile Val Thr Ser Ala Ala Asp Lys Gly Leu 150 155 Ile Asp Ile His Asp Arg Arg Pro Leu Val Leu Ser Pro Glu Ala Ala 165 170 Arg Glu Trp Met Arg Gln Asp Val Gly Gly Lys Lys Ala Glu Glu Ile 180 185 Ile Ala Asp Gly Thr Val Pro Ala Asp Glu Phe Ile Trp His Ala Val 200 Thr Arg Ala Val Gly Asn Val Lys Asn Gln Gly Ala Glu Leu Ile Glu 215 Val Ala His Lys Met Glu Lys <210> 10246 <211> 284 <212> PRT <213> Enterobacter cloacae <400> 10246 Trp Glu Ala Gly Arg Tyr Arg Tyr Lys Leu Arg Asn His Phe Gln Val 10 Glu Gly Met Ile Leu Asn Asp Ile Ala Ile Ile Ala Leu Ala Gly Phe 20 25 Thr Thr Gly Ile Thr Thr Val Leu Phe Gly Phe Gly Gly Phe Val 35 40 Val Val Pro Phe Val Tyr Gln Leu Met Leu Arg Gln Thr Glu Leu Ala 55 60 Leu Asn Ala Met His Ile Ala Val Ala Thr Ser Thr Ser Val Met Ile 70 Phe Asn Ala Gly Trp Val Thr Tyr Arg Asn Trp Arg Ala Cys Glu Leu 85 90 Ser Ser Gln Met Leu Phe Pro Leu Leu Trp Phe Ile Ala Ile Gly Ala 105 Ile Val Gly Ser Cys Leu Ala Gly Ile Phe Ser Glu Ser Val Val Arg 120 Ala Leu Phe Ile Phe Tyr Met Leu Thr Thr Ile Ser Asp Cys Leu Leu 135 Arg Lys Gly Phe Leu Gly Gly Ser Ser Leu Arg Arg Leu Ser Phe Pro 150 155 Val Val Thr Gly Gly Val Thr Ile Gly Met Ile Ala Ala Leu Leu 165 170 Gly Val Gly Ser Val Met Thr Val Pro Leu Leu Arg Arg His Gly 185 190 180 Tyr Ala Met Arg Glu Cys Ile Ser Ala Ser Asn Pro Leu Ser Leu Pro 200 195 Val Ala Leu Cys Gly Ala Val Thr Tyr Ala Val Ile Gly Trp Gln Thr 215 220 Ile Pro Val Lys Gly Phe Leu Gly Phe Ile Asn Leu Lys Ile Leu Gly 230 235

Met Leu Val Leu Thr Gly Trp Ala Gly Ile Val Phe Ser Arg Arg Val

245 250 Ile Pro Ala Val Pro Asp Ile Trp His Ala Arg Ile Tyr Val Met Leu 265 Leu Phe Leu Val Leu Leu Ala Met Leu Phe Gln <210> 10247 <211> 203 <212> PRT <213> Enterobacter cloacae <400> 10247 His Pro Ala Leu Ser Arg Ser Ser His Trp Pro His Gly Ser Thr Val 10 Met Ser Thr Pro Cys Asp Val Lys Leu Arg Pro Leu Glu Arg Glu Asp 25 Leu Arg Phe Val His Gln Leu Asp Asn Asn Ala Ser Val Met Arg Tyr 40 Trp Phe Glu Glu Pro Tyr Glu Ala Phe Val Glu Leu Ser Asp Leu Tyr 55 60 Asp Lys His Ile His Asp Gln Ser Glu Arg Arg Phe Val Val Glu Cys 70 75 Glu Gly Glu Lys Ala Gly Leu Val Glu Leu Val Glu Ile Asn His Val 90 His Arg Arg Ala Glu Phe Gln Ile Ile Ser Pro Glu His Gln Gly 105 110 Lys Gly Leu Ala Ser Arg Ala Ala Lys Leu Ala Met Asp Tyr Gly Phe 120 125 Asn Val Leu Asn Leu Tyr Lys Leu Tyr Leu Ile Val Asp Lys Glu Asn 135 140 Glu Lys Ala Ile His Ile Tyr Arg Lys Leu Gly Phe Met Val Glu Gly 150 Glu Leu Ile His Glu Phe Phe Ile Asn Gly Glu Tyr Arg Asn Thr Ile 165 170 Arg Met Cys Ile Phe Gln His Gln His Leu Ala Gly His Lys Ser Ser 185 Ser Ala Ser Leu Leu Lys Pro Thr Ala Gln 200 195 <210> 10248 <211> 775 <212> PRT <213> Enterobacter cloacae <400> 10248 Val Met Ser Glu Val Glu His His Gly Gly Ile Ser Arg Arg Thr Leu 10 Val Lys Ser Thr Ala Ile Gly Ser Leu Ala Leu Ala Ala Gly Gly Ile 25 Ala Leu Pro Phe Gly Leu Lys Ser Ala Ala Ala Ala Val Gln Ser Ala 40 Ile Gln Pro Ala Glu Asp Lys Val Val Trp Gly Ala Cys Ser Val Asn 55 Cys Gly Ser Arg Cys Ala Leu Arg Leu His Val Arg Asp Asp Glu Val 70 75 Tyr Trp Val Glu Thr Asp Asn Thr Gly Glu Asp Val Tyr Gly Asn His 90 Gln Val Arg Ala Cys Leu Arg Gly Arg Ser Ile Arg Arg Ile Asn 105 His Pro Asp Arg Leu Asn Tyr Pro Met Lys Arg Val Gly Lys Arg Gly

Glu Gly Lys Phe Glu Arg Ile Thr Trp Glu Glu Ala Leu Asp Thr Ile 135 140 Ala Ala Ser Leu Lys Ser Val Val Glu Lys Tyr Gly Asn Glu Ala Val 150 155 Tyr Ile Asn Tyr Ser Ser Gly Ile Val Gly Gly Asn Ile Thr Arg Ser 165 170 Ser Pro Tyr Ala Ser Leu Val Ala Arg Leu Met Asn Cys Tyr Gly Gly 180 185 Phe Leu Ser His Tyr Gly Thr Tyr Ser Thr Ala Gln Ile Ala Cys Ala 200 Met Pro Tyr Thr Tyr Gly Ser Asn Asp Gly Asn Ser Thr Ser Asp Ile 215 Glu Asn Thr Lys Leu Val Val Met Phe Gly Asn Asn Pro Ala Glu Thr 230 235 Arg Met Ser Gly Gly Gle Thr Tyr Phe Leu Glu Gln Ala Arg Glu 245 250 Arg Ser Asn Ala Arg Met Ile Val Ile Asp Pro Arg Tyr Thr Asp Thr 260 265 Ala Ala Gly Arg Glu Asp Glu Trp Ile Pro Ile Arg Pro Gly Thr Asp 280 285 Ala Ala Leu Val Ala Gly Ile Ala Trp Val Leu Ile Asn Glu Asn Leu 295 300 Val Asp Gln Pro Phe Leu Asp Lys Tyr Cys Val Gly Tyr Asp Glu Lys 315 310 Thr Leu Pro Glu Gly Ala Pro Ala Asn Gly His Tyr Lys Ala Tyr Ile 330 325 335 Leu Gly Gln Gly Asp Asp Lys Thr Ala Lys Thr Pro Asp Trp Ala Ser 340 345 Arg Ile Thr Gly Ile Pro Ala Glu Arg Ile Ile Lys Leu Ala Arg Glu 360 Ile Gly Ser Ala Lys Pro Ala Tyr Ile Cys Gln Gly Trp Gly Pro Gln . 375 380 Arg Gln Ala Asn Gly Glu Gln Thr Ser Arg Ala Ile Ala Met Leu Pro 390 395 Ile Leu Thr Gly Asn Val Gly Ile Asn Gly Gly Asn Ser Gly Ala Arg 405 410 Glu Ser Thr Tyr Thr Ile Thr Ile Glu Arg Met Pro Leu Pro Glu Asn 420 425 Pro Val Lys Thr Gln Ile Ser Cys Phe Ser Trp Thr Asp Ala Ile Val 435 440 Arg Gly Pro Glu Met Thr Ala Leu Arg Asp Gly Val Arg Gly Lys Asp 455 Lys Leu Asp Val Pro Ile Lys Phe Ile Trp Asn Tyr Ala Gly Asn Thr 470 475 Ile Ile Asn Gln His Ser Asp Ile Asn Lys Thr His Asp Ile Leu Gln 490 Asp Glu Ser Lys Cys Glu Thr Ile Val Val Ile Asp Asn Phe Met Thr 505 Ser Ser Ala Lys Tyr Ala Asp Ile Val Leu Pro Asp Leu Met Thr Val 520 525 Glu Glu Asp Ile Ile Pro Asn Asp Tyr Ala Gly Asn Met Gly Tyr 535 540 Leu Ile Phe Leu Gln Pro Val Thr Ala Pro Lys Phe Glu Arg Lys Pro 550 555 Ile Tyr Trp Ile Met Ser Glu Val Ala Lys Arg Leu Gly Pro Asp Ile 565 570 His Gln Lys Phe Thr Glu Gly Arg Thr Gln Glu Gln Trp Leu Arg Tyr 585 Leu Tyr Asp Lys Met Val Ala Lys Asp Pro Leu Leu Pro Ser Tyr Asp 600 Ala Leu Lys Lys Met Gly Ile Tyr Lys Arg Lys Asp Pro Asn Gly His

<400> 10250

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                                             620
Phe Val Ala Tyr Lys Lys Phe Arg Asp Asp Pro Asp Ala Asn Pro Leu
                   630
                                       635
Lys Thr Pro Ser Gly Lys Ile Glu Ile Tyr Ser Ser Lys Leu Ala Asp
                645
                                    650
Ile Ala Ala Thr Trp Glu Leu Gln Lys Asp Glu Thr Ile Thr Pro Leu
                                665
Pro Val Tyr Thr Ser Thr Phe Glu Gly Trp Asp Ala Pro Glu Arg Ser
                            680
                                                 685
Lys Phe Pro Leu Gln Leu Phe Gly Phe His Phe Lys Ala Arg Thr His
                        695
                                            700
Ser Ser Tyr Gly Asn Val Asp Val Leu Gln Ala Ala Cys Arg Gln Glu
                                        715
                    710
Val Trp Leu Asn Pro Val Asp Ala Glu Gln Arg Gly Ile Lys Asn Gly
                725
                                    730
Asp Met Val Arg Val Phe Asn Asp Arg Gly Glu Val Arg Ile Ala Ala
            740
                                745
Lys Val Thr Pro Arg Ile Met Pro Gly Val Ser Ala Met Gly Gln Gly
                            760
Ala Gly Met Thr Pro Thr
    770
<210> 10249
<211> 207
<212> PRT
<213> Enterobacter cloacae
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Pro Met Thr Thr Gln Tyr Gly Phe Phe Ile Asp Ser Ser Arg Cys Thr
Gly Cys Lys Thr Cys Glu Leu Ala Cys Lys Asp Tyr Lys Asp Leu Thr
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Pro Asp Val Ser Phe Arg Arg Ile Tyr Glu Tyr Ala Gly Gly Asp Trp
                            40
Gln Glu Asp Asn Gly Val Trp His Gln Asn Val Phe Ala Tyr Tyr Leu
                        55
Ser Ile Ala Cys Asn His Cys Glu Asp Pro Ala Cys Thr Lys Val Cys
                    70
Pro Ser Gly Ala Met His Lys Arg Asp Asp Gly Phe Val Val Val Asp
                                    90
Glu Asp Val Cys Ile Gly Cys Arg Tyr Cys His Met Ala Cys Pro Tyr
            100
                                105
Gly Ala Pro Gln Tyr Asn Ala Ala Lys Gly His Met Thr Lys Cys Asp
                            120
Gly Cys His Ser Arg Val Ala Asp Gly Lys Lys Pro Ile Cys Val Glu
                        135
Ser Cys Pro Leu Arg Ala Leu Asp Phe Gly Pro Ile Glu Glu Leu Arg
                    150
                                        155
Lys Lys His Gly Gln Leu Ala Ala Val Ala Pro Leu Pro Ser Ala His
                165
                                    170
Phe Thr Lys Pro Ser Ile Val Ile Lys Pro Asn Ala Asn Ser Arg Pro
                                185
Thr Gly Asp Thr Thr Gly Tyr Leu Ala Asn Pro Lys Glu Val
        195
                            200
<210> 10250
<211> 241
<212> PRT
<213> Enterobacter cloacae
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Thr Asp Trp Pro Trp Ala Ile Leu Trp Ser Ala Tyr Asp Arg Arg Val
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Ser Asn Cys Arg Leu Thr Gln Val Arg Gly Ala Thr Arg Ala Gln Val
            20
                                25
Arg Lys Val Val Met Asn Asp Val Ser His Arg Glu Ser Phe Ala Phe
                            40
                                                45
Ser Ala Arg Val Leu Gly Ala Leu Phe Tyr Phe Ala Pro Asp Ser Glu
                        55
                                            60
Gln Ile Ala Pro Leu Val Ser Ala Leu Thr Ala Gly Asp Trp Val Gln
                    70
                                        75
Asp Trp Pro Leu Ala Glu Glu Asn Leu Leu Pro Val Ala Ser Met Phe
                                    90
Lys Thr Pro Ser Asp Glu Ala Leu Lys Asp Ala Trp Gln Arg Leu Phe
                                105
Ile Gly Pro Tyr Ala Leu Pro Ala Pro Pro Trp Gly Ser Val Trp Leu
                            120
Asp Arg Glu Ser Val Leu Phe Gly Asp Ser Thr Leu Ala Leu Arg Gln
                        135
                                            140
Trp Met Arg Glu Asn His Ile Ala Phe Glu Met Gln Asn Glu Pro
                    150
                                        155
Glu Asp His Phe Gly Thr Leu Leu Met Leu Ala Ala Trp Leu Ala Glu
                165
                                    170
Asn Gly Arg Glu Thr Glu Arg Asp Gln Leu Leu Ala Trp His Leu Leu
            180
                                185
                                                    190
Pro Trp Ser Thr Arg Phe Leu Ser Val Phe Val Glu Asn Ala Ala His
                            200
Pro Phe Tyr Thr Ala Leu Gly Lys Leu Ala Gln Leu Thr Leu Ala Glu
                        215
                                            220
Trp Gln Ser Thr Leu Leu Ile Pro Ile Val Glu Lys Thr Leu Tyr Arg
                    230
                                        235
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<211> 97
<212> PRT
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<213> Enterobacter cloacae

<400> 10251

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<210> 10252
<211> 246
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<212> PRT

<213> Enterobacter cloacae

<400> 10252

Arg Met Arg Thr Gly Arg His Thr Ala Met His Pro Leu Leu Lys Arg

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10
Ser Leu Leu Phe Val Gly Ala Ile Ile Val Val Leu Ala Leu Leu Thr
                                25
Trp Gly Ile Gly Leu Glu Thr Ile Lys Ala Arg Gln Val Asp Leu Ile
                            40
                                                45
Tyr Leu Gly Gln Gln His Leu Ile Leu Val Phe Ser Ser Met Phe Phe
                        55
Ala Leu Leu Val Gly Ile Pro Ser Gly Ile Leu Leu Ser Arg Pro Ala
                    70
                                        75
Ala Arg Gly Ile Ala Glu Tyr Val Met Gln Ile Phe Asn Val Gly Asn
                                    90
Thr Leu Pro Pro Leu Ala Val Leu Ala Leu Ala Met Val Val Ile Gly
                                105
Ile Gly Asp Lys Pro Ala Ile Ile Ala Leu Phe Leu Ala Ser Leu Leu
                            120
Pro Ile Val Arg Asn Thr Tyr Ala Gly Leu Cys Ser Val Pro Ala Ser
                        135
Leu Leu Glu Ala Ala Asn Gly Ile Gly Met Thr Lys Trp Gln Arg Leu
                    150
                                        155
Arg Gln Val Glu Ile Pro Asn Ala Trp Pro Val Met Leu Ser Gly Ile
                165
                                    170
Arg Ile Ala Thr Ala Ile Asn Val Gly Thr Ala Pro Leu Ala Phe Leu
            180
                                185
Ile Gly Ala Ser Ser Tyr Gly Glu Leu Ile Phe Pro Gly Ile Tyr Leu
                            200
                                                205
        195
Asn Asp Phe Pro Thr Leu Ile Leu Gly Ala Ala Ala Thr Ala Leu Phe
                        215
                                            220
Ala Leu Ile Leu Asp Thr Leu Leu Ala Ala Leu Gly Arg Leu Leu Ser
                    230
                                        235
Pro His Leu Ala Arg
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<210> 10253

<211> 304

<212> PRT

<213> Enterobacter cloacae

<400> 10253

Gln Gly Ala Ser Met Arg Leu Phe Ser Gly Leu Thr Ala Leu Cys Ala 10 Ala Ala Leu Phe Thr Ser Gln Ala Leu Ala Ala Pro Leu Ile Leu Ala Thr Lys Ser Phe Thr Glu Gln His Ile Leu Ser Ala Met Thr Val Gln Tyr Leu Gln Lys Lys Gly Phe Gln Val Gln Pro Gln Thr Asn Ile Ala 55 Thr Val Ile Ser Arg Asn Ala Met Ile Asn Lys Gln Ile Asp Met Thr 70 75 Trp Glu Tyr Thr Gly Thr Ser Leu Ile Ile Phe Asn His Ile Asn Lys 85 90 Arg Met Ser Pro Gln Glu Ser Tyr Glu Thr Val Lys Arg Leu Asp Ala 100 105 110 Lys His Gly Leu Val Trp Leu Lys Pro Ala Asp Met Asn Asn Thr Tyr 120 125 Ala Phe Ala Met Gln Arg Lys Arg Ala Glu Ala Glu His Ile Asn Thr 135 140 Met Ser Glu Met Val Ala Lys Ile Glu Gln Ile Arg Lys Thr Asp Pro 150 155 Asp Asn Asn Trp Leu Leu Gly Leu Asp Leu Glu Phe Ala Gly Arg Ser 165 170 Asp Gly Met Lys Pro Leu Gln Ala Ala Tyr Lys Met Glu Leu Asp Arg

180 185 Pro Gln Ile Arg Gln Met Asp Pro Gly Leu Val Tyr Asn Ala Val Arg 200 Asp Gly Phe Val Asp Ala Gly Leu Ile Tyr Thr Thr Asp Gly Arg Val 215 220 Lys Gly Phe Asp Leu Lys Val Leu Glu Asp Asp Lys Gly Phe Phe Pro 235 230 Ser Tyr Ala Val Thr Pro Val Val Arg Lys Asp Thr Leu Glu Ala Asn 245 250 Pro Gly Leu Glu Glu Ala Leu Asn Thr Leu Ser Ala Gln Leu Asn Asn 265 260 Asp Val Ile Thr Asp Leu Asn Lys Lys Val Asp Ile Asp His Gln Ser 280 Pro Gln Gln Val Ala Arg Asp Phe Leu Arg Ser Lys Gln Leu Leu 295 <210> 10254 <211> 446 <212> PRT <213> Enterobacter cloacae <400> 10254 Thr Glu Tyr Leu His Phe Pro Thr Leu Ile Leu Trp Ser Tyr Pro Ser Pro Glu Thr Thr Gly Met Phe Lys Gln Gly Leu Cys Val Ser Arg Thr 25 Thr Thr Val Asp Ile Ala Pro Ala Ser Asp Ile Asp Asp Leu Pro Ala Ala Pro Gln Pro Val Gln Phe Ile Lys Arg Gly Thr Pro Gln Phe Met Arg Val Thr Leu Ala Leu Phe Ser Ala Gly Leu Ala Thr Phe Ala Leu 75 Leu Tyr Cys Val Gln Pro Ile Leu Pro Val Leu Ser His Glu Phe Gly 85 90 Val Ser Pro Ala Ser Ser Ser Ile Ser Leu Ser Ile Ser Thr Gly Met 105 Leu Ala Ile Gly Leu Leu Phe Thr Gly Pro Leu Ser Asp Ala Ile Gly 120 125 Arg Lys Gln Val Met Val Thr Ala Leu Met Leu Ala Ser Val Cys Thr 135 130 140 Leu Leu Ser Thr Met Met Thr Ser Trp His Gly Ile Leu Ile Met Arg 150 155 Ala Leu Ile Gly Leu Ser Leu Ser Gly Val Ala Ala Val Gly Met Thr 170 165 Tyr Leu Ser Glu Glu Ile His Pro Ser Phe Val Ala Phe Ser Met Gly 185 190 180 Leu Tyr Ile Ser Gly Asn Ser Ile Gly Gly Met Ser Gly Arg Leu Leu 200 205 Ser Gly Val Phe Thr Asp Phe Phe Asn Trp Arg Ile Ala Leu Ala Val 215 220 Ile Gly Cys Phe Ala Leu Ala Ser Ala Leu Met Phe Trp Lys Ile Leu 230 235 Pro Glu Ser Arg His Phe Arg Pro Thr Ser Leu Arg Pro Lys Thr Leu 250 Phe Ile Asn Phe Arg Leu His Trp Arg Asp Gln Gly Leu Pro Arg Leu 265 Phe Leu Thr Gly Phe Leu Leu Met Gly Ser Phe Val Thr Leu Phe Asn 280 Tyr Ile Gly Tyr Arg Leu Met Leu Ser Pro Trp His Leu Ser Gln Ala 295 300

Leu Val Gly Leu Leu Ser Val Ala Tyr Leu Thr Gly Thr Trp Ser Ser

5725 310 315 Pro Lys Ala Gly Ala Met Thr Ala Arg Phe Gly Arg Gly Pro Val Met 325 330 Leu Val Ser Thr Ala Val Met Leu Phe Gly Leu Leu Met Thr Leu Phe 345 340 Ser Ser Leu Trp Leu Ile Phe Ala Gly Met Leu Leu Phe Ser Ala Gly 360 Phe Phe Ala Ala His Ser Val Ala Ser Ser Trp Ile Gly Pro Arg Ala 375 380 Arg Arg Ala Lys Gly Gln Ala Ser Ser Leu Tyr Leu Phe Ser Tyr Tyr 390 395 Leu Gly Ser Ser Ile Ala Gly Thr Leu Gly Gly Val Phe Trp His Asn 410 Tyr Gly Trp Asn Gly Val Gly Gly Phe Ile Ala Leu Met Leu Cys Ala 420 425 Ala Leu Leu Val Gly Ala Ser Leu His Lys Arg Leu His <210> 10255 <211> 281 <212> PRT <213> Enterobacter cloacae <400> 10255 Leu Pro Pro Pro Glu Cys Asp Met Arg Lys Ser Val Val Leu Leu 10 Gly Thr Phe Ser Leu Phe Ala Gly Phe Ser His Ala Asp Asp Gly Asp 20 25 Asp Asp Ala Ile Ser Ala Lys Glu Val Lys Thr Leu Phe Phe Gly His 4.0 Asp Asp Arg Thr Arg Val Thr Asp Pro Thr Glu Ser Pro Trp Asp Ala 55 Ile Gly Gln Leu Glu Thr Ala Ser Gly Asn Leu Cys Thr Ala Thr Leu 70 Ile Thr Pro Arg Leu Ala Leu Thr Ala Gly His Cys Leu Leu Met Pro 85 90 Pro Glu Gly Lys Pro Asp Lys Ala Ile Ala Leu Arg Phe Val Ser Gln 100 105 Lys Gly Ile Trp Arg Tyr Glu Ile His Gly Ile Glu Gly Arg Val Asp 120 Pro Ser Leu Gly Lys Arg Leu Lys Pro Asp Gly Asp Gly Trp Ile Val 135 140 Pro Pro Gly Ala Ala Ser Trp Asp Phe Gly Leu Ile Val Leu Arg Tyr 150 155 Pro Pro Ser Gly Ile Thr Pro Leu Pro Leu Phe Asp Gly Asp Lys Ala 165 170 Ala Leu Thr Ala Ala Leu Lys Ala Ala Asp Arg Lys Val Thr Gln Ser 185 190 Gly Tyr Pro Val Asp His Leu Asp Ser Leu Tyr Thr His Thr Asp Cys

| 180 | 185 | 190 | 185 | 190 | 185 | 190 | 185 | 190 | 185 | 190 | 185 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195 | 195

245 250 255 Arg Trp Arg Ala Asp Asn Arg Ala Leu Ser Val Thr Gly Phe Arg Asp 260 265 270

Arg Leu Glu Ala Leu Ala Gln Gln 275 280

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<211> 146
<212> PRT
<213> Enterobacter cloacae
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Arg Gly Lys Ala Glu Ser Asp Ala Gly Asp Pro Ser Val Gln Thr Arg
                                    10
Tyr Pro Val Val Asp Ala Arg Arg Asp Asp His Gly Leu Arg Ala Thr
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Ala Ser Ala Leu Ser His Gly His Arg Gln Ser Gly Leu Ala His Asn
Pro Thr Gly Ile Ser Met Gln Lys Asn Ser Ile Val Ala Phe Arg Arg
                        55
Gly Tyr Arg Leu Gln Trp Glu Ala Ala Gln Asp Ser His Val Ile Leu
                    70
                                         75
Tyr Pro Glu Gly Met Ala Lys Leu Asn Glu Thr Ala Ala Ala Ile Leu
                                    90
Glu Leu Val Asp Gly Gln Arg Asp Ala Ala Ile Ile Ala Ile Leu
                                105
                                                     110
            100
Asn Glu Arg Phe Pro Glu Ala Gly Gly Val Asp Asp Asp Val Val Glu
                            120
                                                125
Phe Leu Gln Ile Ala Tyr Gln Gln Lys Trp Ile Ile Phe Arg Glu Pro
                        135
Glu
145
<210> 10257
<211> 766
<212> PRT
<213> Enterobacter cloacae
<400> 10257
Asn Pro Gly Thr Val Thr Ile Met Thr Ile Arg Ile Val Glu Leu Ala
                                    10
Gly Gly Leu Arg Ala Thr Leu Val His Gln Pro Gln Ala Thr Arg Ala
Ala Ala Leu Ala Arg Val Ser Ala Gly Ser His His Glu Pro Pro Arg
Phe Ala Gly Leu Ala His Leu Leu Glu His Leu Leu Phe Arg Gly Ser
Gln Arg Tyr Gln Gly Asp Asp Arg Leu Met Ala Trp Val Gln Arg Gln
                    70
Gly Gly Asn Val Asn Ala Thr Thr Leu Ala Arg His Ser Ala Phe Phe
                                    90
Phe Asp Val Ala Ala Asp Asn Leu Ser Asp Gly Val Ala Arg Leu Arg
                                105
Asp Met Leu Gln Ala Pro Leu Leu Ser Arg Gln Asp Ile Gln Arg Glu
                            120
Val Ala Val Ile Asp Ala Glu Asn Arg Leu Ile Gln Gln His Asp Pro
                        135
Ala Arq Arq Glu Ala Ala Ala Arq His Ala Met Glu Gln Pro Glu Val
                                         155
                    150
Phe Arg Arg Phe Gln Val Gly Ser His Asp Ser Leu Gly Gln Asp Thr
                                    170
                165
Gly Ser Leu His Ala Ala Leu Arg Gly Phe His Arg Arg Tyr Tyr Gly
            180
                                185
                                                     190
Ala Arg His Leu Gln Leu Trp Leu Gln Gly Pro Gln Thr Leu Asp Ala
                            200
Leu Ala Glu Leu Ala His Thr Phe Ala Thr Gly Phe Ala Ser Gly Gly
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Val Pro Glu Ala Ala Pro Pro Leu Arg Leu Ser Ala Glu Ala Asp Tyr 230 235 Gln Leu Ala Val Thr Glu Arg Pro Ala Leu Trp Arg Cys Pro Leu Ile 245 250 Arg Lys Ser Asp Asn Val Thr Leu Leu Arg Glu Phe Leu Leu Asp Glu 260 265 270 Ala Pro Gly Ser Leu Ile Asp Gly Leu Arg Ala Arg Gly Leu Ala Glu 275 280 285 Glu Val Ser Leu Asp Trp Leu Tyr Gln Asp Asp Asp Tyr Gly Trp Leu 295 300 Ala Leu Thr Leu Asp Gly Glu Arg Pro Glu Ala Ile Asp Ala Gln Ile 310 315 Thr Arg Trp Leu Arg Ala Leu Gln Gln Thr Thr Gln Glu Gln Gln Arg 325 330 His Tyr Tyr Arg Leu Ala Gln Gln Arg Phe Ser Ala Leu Ser Pro Leu 345 Asp Gln Leu Arg Gln Arg Ala Phe Gly Phe Ala Pro Gly Ala Ala Pro 360 365 Val Asp Phe Ser Ala Phe Cys Ala Asp Leu Leu Ala Ala Pro Thr Ser 375 380 Tyr Leu Ala Cys Lys Lys Met Glu Thr Ala Glu Ile Ile Ala Ser Gln 390 395 Gly Phe Ala Leu Pro Leu Ser His Trp Arg Arg Gln Pro Val Ala Asp 405 410 Glu Ser Pro Ile Ala Phe Ser Phe Tyr Pro Gln Ala Thr Gln Tyr Ser 420 425 Ala Pro Ala Leu Thr Pro Glu Ala Val Pro Leu Leu His Leu Pro Ala 435 440 Gln Ala Gln Ala Pro Thr Leu Ile Leu Arg Arg Pro Phe Tyr Ser Arg 455 460 Val Ser Glu Ser Gln Gly Val Ala Ile Gly Lys Gln Leu Arg Pro Leu 470 475 Leu Ala Glu Met Arg His Ile Gly Ser Ser Gly Glu Trp Gln Thr Val 490 485 Asp Gly Ser Trp Gln Leu Thr Leu Arg Leu Pro Asp Ala Val Wet 500 505 Ala Glu Pro Ile Ile Gly Ala Ile Ile Asp Arg Leu Ser Arg Pro Thr 520 525 515 Pro Ala Ile Thr Pro Ala Pro Asp Gly Ile Ala Ile Arg Gln Leu Leu 535 540 Lys Gln Leu Pro Glu Arg Leu Ala Ser Glu Pro Ser Arg Asn Gly Trp 550 555 Leu Ala Ala Leu Ala Gly Gly Ser Ala Gly His Ala His Gly Leu Ala 565 570 Arg Gln Leu Gly Leu Leu Arg Ala Pro Val Asn Ala Lys Pro Leu Pro 580 585 590 Leu Ser Asp Cys Pro Gly Gly Val Glu His Ile Pro His Ala Ser Ala 595 600 Asp Ser Ala Leu Leu Val Phe Ile Pro Leu Pro Pro Gly Ala Ser Leu 615 620 Ala Ala Leu Arg Leu Leu Ala Leu Cys Cys Glu Pro Arg Phe Phe Gln 630 635 Arg Leu Arg Val Glu Gln Gln Ile Gly Tyr Val Val Ser Cys Arg Tyr 645 650 Gln Arg Ile Ala Asp Arg Asp Gly Leu Leu Ala Leu Gln Ser Pro 665 670 Asp Arg Ser Pro Val Asn Leu Leu Gly Cys Cys Lys Arg Phe Leu Arg 680 Glu Leu Thr Leu Cys Asp Glu Ser Glu Phe Ser Leu Leu Arg Gln Gln 695 700 Leu Ala Thr Gln Ile Arg Ser Pro Met Asp Ala Ser Ala Thr Ala Val

710 715 Ala Ala Leu Arg Gln Arg Tyr Gly Leu Pro Val Leu Thr Pro Gln Ala 730 725 Ile Asp Ala Leu Gln Pro Asp Glu Ile Val Ala Leu Trp Arg Glu Met 745 740 Thr Arg Arg Arg Arg Trp Arg Val Leu Phe Thr Gly 760 <210> 10258 <211> 222 <212> PRT <213> Enterobacter cloacae <400> 10258 Ile Lys Cys Gln Gln Ala Thr Gly Gln Pro Pro Gln Ser Asn Thr Lys Gln Glu Phe Pro Met Ser Lys Val Leu Val Leu Lys Ser Ser Ile Leu 25 20 Ala Gly Tyr Ser Gln Ser Gly Gln Leu Ser Asp Tyr Phe Val Glu Gln 35 40 Trp Arg Glu Gln His Ser Ala Asp Glu Ile Thr Val Arg Asp Leu Ala 55 Ala Asn Pro Ile Pro Val Leu Asp Gly Glu Leu Val Gly Ala Leu Arg 70 75 Pro Ser Asp Ala Pro Leu Thr Pro Arg Gln Gln Glu Ala Leu Ala Leu 90 85 Ser Asp Glu Leu Ile Ala Glu Leu Gln Ala His Asp Val Ile Val Ile 105 100 Asn Ala Pro Met Tyr Asn Phe Asn Ile Pro Thr Gln Leu Lys Asn Tyr 120 Phe Asp Leu Val Ala Arg Ala Gly Val Thr Phe Arg Tyr Thr Glu Asn 140 135 Gly Pro Glu Gly Leu Val Lys Gly Lys Arg Ala Ile Val Leu Thr Ser 150 155 Arg Gly Gly Ile His Lys Asp Thr Pro Thr Asp Leu Val Ala Pro Tyr 170 165 Met Thr Leu Phe Leu Gly Phe Ile Gly Ile Thr Asp Val Asn Phe Val 180 185 Phe Ala Glu Gly Ile Ala Tyr Gly Pro Glu Val Ala Thr Lys Ala Gln 200 Ser Asp Ala Lys Ala Ala Ile Asp Ser Leu Val Ala Ala 210 215 <210> 10259 <211> 433 <212> PRT <213> Enterobacter cloacae <400> 10259 Ile Ser Arg Arg Ser Ser Asn Asn Ala Val Asn Met Met Asn Lys Ala Thr Thr Leu Ser Ala Asn Ile Thr Thr Arg Ser Asn Trp His Trp Gln Asp Asn Ile Trp Thr Leu Gly Leu Tyr Gly Thr Ala Val Gly Ala Gly 40 Thr Leu Phe Leu Pro Val Glu Ile Gly Thr Arg Gly Pro Val Ile Phe Leu Val Met Leu Leu Gly Leu Pro Leu Ser Leu Ile Pro His Leu 70 75 Leu Leu Cys Arg Val Tyr Met Arg Glu Glu Lys Thr Glu Asn Gly Thr

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Leu Pro Ile Phe Gly Ser Phe Phe Ser Gly Arg Gly Glu Lys Leu Ile
           100
                               105
Thr Leu Phe Tyr Cys Val Thr Phe Phe Pro Val Thr Leu Val Tyr Gly
                            120
                                                125
Val Ala Leu Ile Asn Ala Leu Ser Asn Leu Leu Val Glu His Leu His
                       135
                                            140
Ile Thr Ala Leu Ser Arg Gly Pro Leu Ser Phe Ile Val Val Ala Ala
                    150
                                        155
Leu Tyr Val Val Leu Ser Lys Gly Arg Asp Arg Val Val Ala Ile Met
                                    170
Ser Ala Leu Ala Leu Pro Phe Ala Ala Ser Val Leu Leu Ile Ala Val
                                185
Ser Leu Ile Pro Gly Trp His Leu Ser Asn Leu Thr Asp Thr Ala Ala
                            200
Glu Met Asn Ala Thr Pro Leu Pro Val Thr Leu Lys Asn Ile Trp Leu
                        215
                                            220
Thr Leu Pro Leu Ile Thr Phe Ser Phe Cys Cys Ala Pro Met Val Ser
                                        235
                    230
Pro Leu Thr Ser Tyr Tyr Arg Glu Arg Lys Ala Glu Gly Glu Lys Lys
                245
                                    250
Ala Leu Phe Val Ile Arg Ile Ala Tyr Leu Ala Ile Phe Ala Ser Ile
                                265
            260
Leu Phe Phe Val Leu Ser Cys Val Leu Gly Ile Pro His Asp Asn Phe
                            280
        275
                                                285
Val Arg Ala Lys Ala Glu Asn Leu Asn Val Leu Ser Val Met Lys Gly
                        295
                                            300
Asn Gly Asp Phe Ser Leu Ile Tyr His Ile Ala Pro Leu Ile Ala Ile
                                        315
                    310
Ile Gly Met Thr Lys Ser Phe Leu Gly Val Gly Leu Ser Val Ala Gln
                                    330
                325
Thr Phe Gly Gln Leu Ala Ala Ser Val Ser Gly Lys Lys Ala Ser Ala
                                345
            340
Ser Lys Arg Leu Ala Ser Leu Ala Leu Phe Leu Leu Thr Tyr Gly Ile
        355
                            360
                                                365
Val Tyr Ala Asn Pro Asp Val Leu Ser Leu Ile Glu Met Phe Cys Gly
                        375
    370
                                            380
Pro Leu Ile Ala Val Ile Leu Phe Leu Ile Pro Ala Tyr Leu Ile Tyr
                                        395
                    390
Thr Arg Pro Ser Leu Ala Glu Leu Arg Gly Val Thr Gly Phe Leu Val
                                    410
                405
Val Leu Gly Gly Leu Ala Thr Leu Ser Ala Leu Leu Trp Thr Met Leu
            420
                                425
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<210> 10260
<211> 82
<212> PRT
<213> Enterobacter cloacae
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<400> 10260

Glu

<210> 10261

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<211> 299
<212> PRT
<213> Enterobacter cloacae
<400> 10261
Pro Thr Ser Phe Thr Pro Val His Gly Ile Ser Pro Gln Ser Arg Pro
                                     10
Ala Cys Ala Ser Leu Gln Trp Arg His Thr Asn Val Ala Leu Thr Thr
                                25
Cys Arg Arg Ala Cys Tyr Val Ser Thr Thr Gln Lys Ala Leu Arg Asn
Ser Glu Met Ile Ile Leu Val Thr Gly Ala Thr Ala Gly Phe Gly Glu
                        55
Ser Ile Thr Arg Arg Phe Val Ala Asn Gly His Lys Val Ile Ala Thr
                    70
                                         75
Gly Arg Arg Gln Glu Arg Leu Gln Glu Leu Lys Asp Glu Leu Gly Asp
                85
                                     90
Ser Ile Leu Thr Ala Gln Leu Asp Val Arg Asn Arg Ala Ala Ile Glu
            100
                                105
Glu Met Ile Ala Asn Leu Pro Ala Glu Trp Arg Glu Ile Asp Val Leu
                            120
Val Asn Asn Ala Gly Leu Ala Leu Gly Met Glu Pro Ala His Lys Ala
                        135
                                             140
Ser Leu Glu Asp Trp Glu Asn Met Ile Asp Thr Asn Asn Lys Gly Leu
                    150
                                         155
Val Tyr Met Thr Arg Ala Val Leu Pro Gly Met Val Glu Arg Asn Arg
                165
                                    170
Gly His Ile Ile Asn Ile Gly Ser Thr Ala Gly Ser Trp Pro Tyr Ala
            180
                                185
                                                     190
Gly Gly Asn Val Tyr Gly Ala Thr Lys Ala Phe Val Arg Gln Phe Ser
                            200
                                                 205
Leu Asn Leu Arg Thr Asp Leu His Gly Thr Ala Ile Arg Val Thr Asp
                        215
                                             220
Val Glu Pro Gly Leu Val Gly Gly Thr Glu Phe Ser Asn Val Arg Phe
                    230
                                         235
Lys Gly Asp Asp Ala Lys Ala Asp Lys Thr Tyr Glu Asn Ala Asn Ala
                245
                                    250
Leu Thr Pro Glu Asp Ile Thr Glu Thr Val Trp Trp Val Ala Asn Leu
                                265
Pro Lys His Val Asn Ile Asn Thr Val Glu Met Met Pro Val Ser Gln
                            280
Thr Tyr Ala Gly Leu Ser Val His Arg Gly
    290
<210> 10262
<211> 236
<212> PRT
<213> Enterobacter cloacae
<400> 10262
Leu Ser Glu Lys Ser Gln Pro Met Ala Ala Glu Ser Gln Leu Asn Pro
                                    1Ω
Thr Gln Pro Val Asn Gln Gln Ile Tyr Arg Ile Leu Arg Arg Asp Ile
                                25
Val Arg Cys Leu Ile Pro Pro Gly Thr Pro Leu Ser Glu Lys Glu Val
                            40
Ser Val Arg Phe Asp Val Ser Arg Gln Pro Val Arg Glu Ala Phe Ile
```

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5.5
Lys Leu Ala Glu Asn Gly Leu Ile Gln Ile Arg Pro Gln Arg Gly Ser
                   70
                                        75
Tyr Val Asn Lys Ile Ser Leu Ser Gln Val Arg Asn Gly Cys Phe Val
               85
                                    90
Arg Gln Ala Ile Glu Cys Ala Val Val Arg Arg Ala Ala Ser Leu Ile
                               105
Asn Asp Asn Gln Cys Tyr Leu Leu Glu Gln Asn Leu His Gln Gln Arg
                            120
Ile Ala Ile Asp Arg Lys Gln Leu Asn Asp Phe Phe Gln Leu Asp Asp
                        135
Glu Phe His Gln Lys Leu Ala Gln Ile Ala Glu Cys Gln Leu Ala Trp
                    150
                                        155
Asp Thr Val Glu Asn Ile Lys Ala Thr Ile Asp Arg Val Arg Tyr Met
                165
                                    170
Ser Leu Asp His Val Ser Pro Pro Glu Met Leu Leu Arg Gln His His
                                185
Asp Ile Phe Ser Ala Leu Glu Lys Arg Asp Val Glu Ala Val Asp Lys
                            200
Ala Met Thr Leu His Leu Gln Glu Ile Ser Glu Ser Val Gln Leu Ile
                        215
                                            220
Arg Gln Glu Asn Arg Glu Trp Phe Ser Glu Glu
                    230
<210> 10263
<211> 124
<212> PRT
<213> Enterobacter cloacae
<400> 10263
Ser Asp Cys Leu His Pro Phe Lys Gly Asn Ala Met Thr Thr Leu Ser
Lys Arg Leu Cys Leu Ala Ala Ala Leu Ala Leu Ser Ser Phe Ala Phe
            20
Ala Ala Thr Ala Ser Ala Glu Thr Ser Lys Leu Ile Ile Glu Ser Gly
                            40
Asp Ser Ala Gln Ser Arq Gln Asn Ala Ala Met Asp Lys Glu Gln Trp
                        55
Asn Asp Thr Arg Ser Leu Arg Gln Lys Val Asn Lys Arg Val Glu Lys
                                        75
Glu Trp Asp Lys Glu Asp Val Ala Phe Asp Ala Arg Asp Lys Cys Gln
Gln Ser Ala Asn Val Asn Ala Tyr Trp Glu Pro Asn Thr Leu Arg Cys
                                105
Leu Asp Arg Arg Thr Gly Arg Thr Val Ala Pro
<210> 10264
<211> 309
<212> PRT
<213> Enterobacter cloacae
<400> 10264
Leu Asn Leu Thr Pro Thr Ala Val Arg Arg Gly Thr Pro Pro Ala Thr
                                    10
Trp Gln Thr Arg Arg Cys Glu Met Gly Ser Gly Trp His Glu Trp
                                25
Pro Leu Met Ile Phe Thr Val Phe Gly Gln Cys Val Ala Gly Ala Leu
Ile Val Met Gly Phe Val Trp Leu Lys Glu Asn Asp Asp Lys Ala Arg
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Met Arg Ile Val Arg Ser Leu Phe Phe Leu Trp Leu Val Met Gly Ile
                    70
                                        75
Gly Phe Met Ala Ser Val Leu His Leu Gly Ser Pro Leu Arg Ala Phe
                85
                                    90
Asn Ser Leu Asn Arg Val Gly Ala Ser Ala Leu Ser Asn Glu Ile Ala
            100
                                105
Ala Gly Ser Leu Phe Phe Ala Val Gly Gly Phe Trp Trp Leu Val Ser
                            120
Val Ile Gly Lys Met Pro Pro Ala Leu Gly Lys Ile Trp Leu Val Val
                        135
                                            140
Ser Gln Leu Leu Gly Ile Val Phe Val Trp Ala Met Thr Arg Val Tyr
                    150
                                        155
Gln Ile Glu Thr Val Pro Thr Trp Tyr Thr Gly Tyr Thr Thr Leu Ser
                                    170
                165
Phe Phe Leu Thr Met Val Leu Ala Gly Pro Leu Leu Ala Ala Leu Leu
            180
                                185
Leu Arg Val Ala Asn Val Thr Phe Lys Gly Thr Leu Ala Ala Ser Val
                            200
Ser Val Leu Ala Ile Ile Val Cys Val Ala Val Val Leu Gln Ser
                        215
                                             220
Asn Thr Leu Gly Thr Ile Gln Ser Ser Ile Gln Gln Ala Ser Ala Leu
                    230
                                         235
Leu Pro Asp Tyr Gly Ser Leu Gln Val Trp Arg Ile Ala Leu Leu Ala
                245
                                    250
Ala Gly Leu Gly Cys Trp Ile Cys Pro Leu Ile Arg Arg Gln Glu Pro
            260
                                265
Lys Thr Leu Gly Leu Phe Ala Gly Val Val Leu Val Ala Leu Gly Glu
                            280
Leu Ile Gly Arg Gly Leu Phe Tyr Gly Leu His Met Thr Ala Gly Leu
                        295
                                             300
Ala Ile Ala Gly
305
<210> 10265
<211> 151
<212> PRT
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<213> Enterobacter cloacae

<400> 10265

Ser Arg Leu Ser Lys Lys Arg Cys Thr Asp Asn Ser Thr Trp Leu Val 10 His Pro Leu Cys Arg Pro Gly Ser His Ile Phe Ala Ala Thr Gln Arg 25 20 His Asn Cys Tyr Thr Val Tyr Asn Tyr Ser Ile Arg Gly Cys Thr Met 40 45 Ala Val Glu Thr Lys Phe Val Val Val Arg Lys Gly Glu Glu Lys Met 55 Thr Phe Ala Ser Lys Lys Glu Ala Asp Ala His Asp Lys Leu Leu Asp 70 75 Met Ala Glu Ala Phe Thr Asp Trp Leu Leu Gln Ser Gly Met Gln Met 85 90 Asp Glu Thr Gln Ala Glu Asn Leu Gly Leu Tyr Leu Ala Glu Gln Lys 105 Glu Ser Val Gln His Ile Leu Arg Thr Ser Lys Leu Pro Glu Arg Asn 120 Ala Ala Thr Asp Lys Thr Ala Ser Asp Ala Asp Ser Ser Lys Lys Ile Arg Ala Val Lys Ala Ala

<211> 419 <212> PRT <213> Enterobacter cloacae

<400> 10266 Tyr Ser Tyr Val Asp Cys Gly Arg Ala Asp Asp Leu Ser Phe Ser Asp 10 Cys Ala Arg Leu Val Ala Ala Pro Phe Ala Gly Gly Thr Asp Ser Glu 25 Gly Asp Ser Ile Met Ile Lys Leu Glu Asn Leu Thr Lys Gln Phe Ser 40 Gln Lys His Gly Gln Thr Phe Lys Ala Val Asp Asn Val Asn Leu Asn Val Pro Glu Gly Glu Met Cys Val Leu Leu Gly Pro Ser Gly Cys Gly 75 Lys Thr Thr Leu Lys Met Ile Asn Arg Leu Ile Thr Pro Ser Ser 90 Gly Thr Ile Leu Ile Asn Gly Glu Asp Thr Ser Gly Met Asp Thr Val 105 100 Thr Leu Arg Arg Asn Ile Gly Tyr Val Ile Gln Gln Ile Gly Leu Phe 120 115 Pro Asn Met Thr Ile Glu Glu Asn Ile Thr Val Val Pro Arg Met Leu 135 140 Gly Trp Asp Lys Ala Arg Cys Lys Ser Arg Ala Glu Glu Leu Met Asp 150 155 Met Val Ala Met Asp Pro His Lys Phe Leu His Arg Tyr Pro Arg Glu 165 170 Met Ser Gly Gly Gln Gln Arg Ile Gly Val Ile Arg Ala Leu Ala 180 185 Ala Asp Pro Pro Val Leu Leu Met Asp Glu Pro Phe Gly Ala Val Asp 195 200 205 Pro Ile Asn Arg Glu Val Ile Gln Asn Gln Phe Leu Glu Met Gln Arg 215 220 Lys Leu Lys Lys Thr Val Met Leu Val Ser His Asp Ile Asp Glu Ala 230 235 Leu Lys Leu Gly Asp Arg Ile Ala Val Phe Arg Gln Gly Arg Ile Val 245 250 Gln Cys Ala Ser Pro Asp Glu Leu Leu Ala Lys Pro Ala Asn Glu Phe 265 Val Gly Ser Phe Val Gly Gln Asp Arg Thr Leu Lys Arg Leu Leu Leu 275 280 285 Val Ser Ala Gly Asp Val Thr Asp Gln Gln Pro Thr Ile Thr Val Arg 295 300 Glu Ser Thr Pro Leu Pro Glu Ala Phe Ala Thr Met Asp Asp Asn Asp 310 315 Ile Arg Ala Ile Thr Val Val Asp Glu His Gly Lys Pro Leu Gly Phe 330 Val Lys Arg Arg Glu Ala Arg Asn Ala Ser Gly Ser Cys Gly Asp Ile Leu His Pro Phe Arg Met Thr Gly Lys Ala Glu Asp Asn Leu Arg Val 360 Val Leu Ser Arg Leu Tyr Glu Ser Asn Thr Ser Trp Met Pro Ile Val 375 Asp Glu Asp Gly Arg Tyr Asn Gly Glu Ile Ser Gln Asp Tyr Ile Ala 390 395 Glu Tyr Leu Ser Ser Gly Arg Thr Arg Arg Ala Leu Asn Ile His Ser 410 Glu Ser

<211> 472 <212> PRT

<213> Enterobacter cloacae

<400> 10267 Ala Phe Arg Pro Gly Thr Ala Arg Pro Phe Ser Ala Arg Ile Pro Phe 10 Ala Asn Leu Pro Ile Ser Arg His Asn Ile Val Ser Ser Pro Leu Asn 25 His Asp Phe Met Gln Arg Leu His Ala Tyr Pro Asp Ile Arg Ala Met 40 Phe Arg Arg Leu Leu Ile Ala Thr Val Thr Gly Val Leu Ala Ala Leu 55 Ala Val Ala Val Phe Arg His Ser Met Tyr Leu Leu Glu Trp Leu Phe 75 Leu Ser Asn Glu Ser Gly Ser Leu Val Asn Ala Ala Ala Leu Ser Pro Trp Arg Arg Ala Leu Thr Pro Ala Leu Gly Gly Leu Ala Ala Gly 105 100 Met Leu Leu Trp Gly Trp Gln Arg Met Thr Ala Gln Arg Pro His Ala 120 125 Pro Thr Asp Tyr Met Glu Ala Leu Glu Thr Gly Asp Gly Gln Phe Asp 135 140 Tyr Gly Ala Ser Leu Val Lys Ser Leu Ala Ser Leu Leu Val Val Ala 150 155 Ser Gly Ser Ala Ile Gly Arg Glu Gly Ala Met Ile Leu Leu Ala Ala 165 170 Leu Ala Ala Ser Phe Phe Ala Gln Arg Cys Thr Pro Lys Ser Glu Trp 180 185 Lys Leu Trp Ile Ala Cys Gly Ala Ala Ala Gly Met Ala Ser Ala Tyr 195 200 205 His Ala Pro Leu Ala Gly Ser Leu Phe Ile Ala Glu Ile Leu Phe Gly 215 220 Thr Leu Met Leu Ala Ser Leu Gly Pro Val Val Ile Ala Ala Val Val 230 235 Ala Leu Leu Thr Thr Arg Leu Leu Ser Pro Gly Ala Asn Thr Leu Tyr 250 245 Asp Val His Leu Ser Glu Met Leu Thr Ala Val Asp Tyr Phe Leu Ile 260 265 Val Gly Val Gly Leu Leu Ala Gly Val Cys Gly Pro Leu Leu Met Trp 275 280 285 Leu Met Ala Ala Ser His Arg Leu Phe Leu Arg Leu Lys Leu Ser Pro 295 300 Pro Trp Gln Leu Ala Leu Gly Gly Leu Ile Val Gly Leu Leu Ser Leu 310 315 Leu Thr Pro Lys Val Trp Gly Asn Gly Tyr Ser Val Val Gln Ala Phe 325 330 Leu Gln Ser Pro Pro Leu Leu Ser Val Ile Ala Gly Val Phe Ile Cys Lys Leu Leu Ala Val Leu Ala Ser Ser Gly Ser Gly Ala Pro Gly Gly Val Phe Thr Pro Thr Leu Phe Val Gly Met Ala Thr Gly Met Leu Phe 375 Ala Gln Ile Phe Ala Leu Trp Phe Pro Gly Ser Glu Thr Ala Ile Leu 390 395 Leu Gly Leu Ala Gly Met Ala Thr Leu Leu Ala Ala Thr Thr His Ala 405 410 Pro Ile Met Ser Ala Leu Met Val Cys Glu Met Thr Gly Gln Tyr Phe 425 420. 430 Leu Leu Pro Gly Leu Leu Val Ala Cys Val Val Ala Ser Val Leu Ser

<212> PRT

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Arg Thr Leu Arg His Asp Ser Thr Tyr Gly Gln His Thr Ala Glu Ser
                        455
Arg Glu Ile Asp Val Val Arg
<210> 10268
<211> 355
<212> PRT
<213> Enterobacter cloacae
<400> 10268
Ile Lys Asn Cys Ser Gly Thr Ser Met Ala Lys Pro Ile Ile Thr Leu
Asn Gly Leu Lys Ile Val Ile Met Leu Gly Met Leu Val Ile Ile Leu
            20
                                25
Thr Gly Val Arg Phe Ala Ala Asp Ile Ile Val Pro Phe Ile Leu Ala
                            40
Leu Phe Ile Ala Val Ile Leu Asn Pro Leu Val Gln Arg Met Val Arg
                        55
Leu Arg Ile Pro Arg Val Leu Ala Ile Ser Leu Leu Ile Ser Ile Ile
                    70
                                        75
Ile Val Ala Met Val Leu Leu Val Ala Tyr Leu Gly Thr Ser Leu Asn
                85
                                    90
Glu Leu Ala Arg Thr Leu Pro Thr Tyr Arg Ser Ser Leu Ala Thr Pro
                                105
            100
Leu Leu Gln Ile Glu Pro Trp Leu Gln Arg Ala Gly Ile Glu Val Ser
                            120
Val Glu Glu Met Leu Lys Tyr. Ile Asp Pro Asn Ala Ala Met Thr Ile
                        135
                                            140
Val Thr Ser Leu Leu Ala Gln Leu Ser Asn Ala Met Thr Ser Ile Phe
                    150
                                        155
Leu Leu Phe Leu Thr Val Val Phe Met Leu Leu Glu Val Pro Gln Leu
                165
                                    170
Pro Ala Lys Leu Gln His Ile Met Val Arg Pro Val Glu Gly Met Gly
            180
                                185
                                                     190
Ala Ile Gln Arg Ala Leu Asp Ser Val Ser Arg Tyr Leu Val Leu Lys
                            200
Thr Ala Ile Ser Leu Val Thr Gly Leu Val Val Trp Gly Met Leu Ala
                        215
                                             220
Ala Leu Asp Val Arg Phe Ala Phe Val Trp Gly Leu Leu Ala Phe Ala
                    230
                                        235
Leu Asn Tyr Ile Pro Asn Ile Gly Ser Val Leu Ala Ala Ile Pro Pro
                245
                                    250
Ile Leu Gln Val Leu Val Phe Ser Gly Leu Tyr Asp Ala Leu Ile Leu
Leu Ala Gly Tyr Leu Val Ile Asn Leu Val Phe Gly Asn Ile Leu Glu
Pro Arg Ile Met Gly Arg Gly Leu Gly Leu Ser Thr Leu Val Val Phe
                        295
Leu Ser Leu Ile Phe Trp Gly Trp Leu Leu Gly Pro Val Gly Met Leu
                    310
                                        315
Leu Ser Val Pro Leu Thr Ile Ile Val Lys Ile Gly Leu Glu Gln Thr
                                    330
                325
Ala Gly Gly Gln Ser Ile Ala Val Leu Leu Ser Asp Met Ser His Lys
                                345
Ala Asp
        355
<210> 10269
<211> 121
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## <213> Enterobacter cloacae

<400> 10269 Gln Val Thr Ser Ala Met Ala Leu Ile Pro Lys Asn Tyr Ala Arg Leu 10 Glu Ser Gly Tyr Arg Glu Lys Ala Leu Lys Ile Tyr Pro Trp Val Cys 25 Gly Arg Cys Ser Arg Glu Phe Val Tyr Ser Asn Leu Arg Glu Leu Thr 40 Val His His Ile Asp His Asp His Thr Asn Asn Pro Glu Asp Gly Ser Asn Trp Glu Leu Leu Cys Leu Phe Cys His Asp His Glu His Ser Lys 75 70 Tyr Thr Glu Ala Asp Gln Tyr Gly Thr Thr Val Val Ala Gly Glu Asp 90 Ala Gln Lys Asp Val Gly Val Ala Thr Phe Asn Pro Phe Ala Asp Leu 100 105 Lys Ala Met Met Asp Lys Lys

<210> 10270 <211> 346

<212> PRT

<213> Enterobacter cloacae

<400> 10270 Lys Thr Val Gly Cys Ala Met Ala Ile Phe Asp Gly His Asn Asp Leu Leu Leu Asn Leu Trp Leu His His Arg Gln Asp Pro Val Thr Ala Leu 20 25 Phe Ser Gly Ile Glu Asn Gly His Leu Asp Tyr Pro Arg Met Gln Gln 40 Gly Gly Phe Ser Gly Gly Leu Phe Ala Leu Phe Val Pro Pro Gln Glu 5.5 Tyr Ile Ala Arg Met Ala Pro Gln Tyr Ala Cys Glu Pro Trp Gln Pro 70 75 Val Asp Ile Leu Trp Gln Gln Leu Thr Leu Leu Lys Gln Leu Val Ala 90 His Ser Asp Gly Arg Ala Arg Leu Cys Leu Ser Ala Ala Asp Ile Glu 100 105 Arg Cys Arg Gln Asp Lys Val Leu Ala Met Val Ala His Ile Glu Gly 120 Ala Gly Gly Phe Asp Gly Glu Gly Asp Leu Gln Ala Leu Tyr Ala 135 140 Ala Gly Val Arg Ser Ile Gly Pro Phe Trp Asn Ile Ala Asn Arg Phe 155 Gly Thr Gly Val Asn Gly Ala Phe Pro Gly Ser Pro Asp Ser Gly Pro 165 170 Gly Leu Thr Ala Glu Gly Ile Ala Leu Ile Lys His Ala Asn Ala Leu 185 190 Asn Met Leu Ile Asp Val Ser His Met Asn Glu Lys Ala Phe Trp Asp 200 205 Thr Ala Arg His Ser Ser Ser Pro Leu Val Ala Thr His Ser Asn Ala 215 220 His Thr Leu Cys Pro Gln Pro Arg Asn Leu Thr Asp Arg Gln Leu Leu 230 235 Ala Ile Arg Asp Ser Gly Gly Val Ala Gly Val Asn Phe Gly Asn Ala 245 250 Phe Leu Arg Ala Asp Gly Lys Arg Asp Ser Asp Thr Pro Leu Ser Thr 265 Ile Val Arg His Ile Asp Tyr Leu Ile Asn Ile Met Gly Asp Asp His

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280
                                                 285
        275
Val Ala Leu Gly Ser Asp Phe Asp Gly Ile Thr Leu Pro Asp Asp Leu
                       295
                                           300
His Asp Val Ser Gly Leu Pro Arg Leu Ile Ser Ala Leu Arg Asp Ser
                                       315
                  310
Gly Tyr Asp Gln Phe Val Leu Asn Lys Leu Leu Trp Gly Asn Trp Gln
                325
                                     330
Lys Val Leu Gln Asn Val Trp Gln Gln
<210> 10271
<211> 281
<212> PRT
<213> Enterobacter cloacae
<400> 10271
Arg Ala Val Ala Ala Ala Ser Arg Pro Cys Ala Ala Gly Asn Arg Ser
                                    10
Glu Leu Gly Arg Asp Glu His His Ala Ser Gly Leu Thr Met His Ile
            20
                                 25
Arg Glu Thr Leu Ser Pro Gln Glu Phe Glu His Ala Leu Arg Ala Lys
        35
                            40
Gly Ala Tyr Tyr His Ile His His Pro Tyr His Ile Ala Met His Asn
                        55
                                             60
Gly Glu Ala Ser Arg Glu Gln Ile Gln Gly Trp Val Ala Asn Arg Phe
                    70
                                         75
Tyr Tyr Gln Thr Thr Ile Pro Leu Lys Asp Ala Ala Ile Met Ala Asn
                85
                                     90
Cys Pro Asp Pro His Thr Arg Arg Lys Trp Val Gln Arg Ile Leu Asp
            100
                                 105
                                                     110
His Asp Gly Ser Asn Gly His Asp Gly Gly Ile Glu Ala Trp Leu Gln
                            120
Leu Gly Glu Ala Val Gly Leu Ser Arg Glu Asp Leu Ile Ser Glu Arg
                        135
His Val Leu Pro Gly Val Arg Phe Ala Val Asp Ala Tyr Val Asn Phe
                    150
                                         155
Ala Arq Arq Ala Asn Trp Gln Glu Ala Ala Cys Ser Ser Leu Thr Glu
                                     170
Leu Phe Ala Pro Gln Ile His Gln Ser Arg Leu Asp Ser Trp Pro Gln
                                 185
His Tyr Pro Trp Ile Lys Glu Glu Gly Tyr Phe Tyr Phe Arg Ser Arg
                             200
Leu Ser Gln Ala Ser Arg Asp Val Glu His Gly Leu Glu Leu Ala Lys
                        215
                                             220
Arg Tyr Cys Asp Ser Ala Glu Lys Gln Asn Arg Met Leu Glu Ile Leu
                    230
                                         235
Gln Phe Lys Leu Asp Ile Leu Trp Ser Met Leu Asp Ala Met Thr Met
                245
                                    250
Ala Tyr Ala Leu Gln Arg Pro Pro Tyr His Thr Val Thr Asp Lys Ala
           260
                                 265
Ala Trp His Thr Thr Arg Leu Val.
       275
                            280
<210> 10272
<211> 395
<212> PRT
<213> Enterobacter cloacae
<400> 10272
Asn Ser Cys Lys Ser Leu Ile Asn Arg Ser Gly Leu Phe Ser Val Ser
```

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Gln Asn Lys Pro Ala Val Asn Pro Pro Leu Trp Leu Leu Ala Glu Leu
            20
                                25
Thr Tyr Arg Cys Pro Leu Gln Cys Pro Tyr Cys Ser Asn Pro Leu Asp
                            40
Phe Ala Arg Gln Asp Gln Glu Leu Thr Thr Glu Gln Trp Ile Glu Val
                        55
                                             60
Phe Arg Gln Ala Arg Ala Met Gly Ser Val Gln Ile Gly Phe Ser Gly
                    70
                                        75
Gly Glu Pro Leu Thr Arg Lys Asp Leu Pro Glu Leu Ile Arg Ala Ala
                85
                                    90
Arg Asp Leu Gly Phe Tyr Thr Asn Leu Ile Thr Ser Gly Ile Gly Leu
                                105
Thr Glu Ser Lys Leu Asp Ala Phe Ser Glu Ala Gly Leu Asp His Ile
                            120
Gln Ile Ser Phe Gln Ala Ser Asp Glu Glu Leu Asn Ala Ala Leu Thr
                        135
                                             140
Gly Asn Lys Lys Ala Phe Gln Gln Lys Leu Ala Met Ala Lys Ala Val
                    150
                                        155
Lys Ala Arg Asp Tyr Pro Met Val Leu Asn Phe Val Leu His Arg His
                165
                                    170
Asn Ile Asp Gln Ile Asp Lys Ile Ile Glu Leu Cys Ile Glu Leu Asp
            180
                                185
Ala Asp Asp Val Glu Leu Ala Thr Cys Gln Phe Tyr Gly Trp Ala Phe
                            200
        195
                                                 205
Leu Asn Arg Gln Gly Leu Leu Pro Thr Arg Glu Gln Ile Ala Arg Ala
                        215
                                             220
Glu Arg Val Val Ala Glu Tyr Arg Gln Lys Met Ala Ala Ser Gly Asn
                    230
                                        235
Leu Thr Asn Leu Leu Phe Val Thr Pro Asp Tyr Tyr Glu Glu Arg Pro
                                    250
                245
Lys Gly Cys Met Gly Gly Trp Gly Ser Ile Phe Leu Ser Val Thr Pro
                                265
            260
Glu Gly Thr Ala Leu Pro Cys His Ser Ala Arg Gln Leu Pro Val Asp
                            280
Phe Pro Ser Val Leu Glu Gln Ser Leu Glu Ser Ile Trp Tyr Asp Ser
                        295
                                             300
Phe Gly Phe Asn Arg Tyr Arg Gly Phe Asp Trp Met Pro Glu Pro Cys
                    310
                                        315
Arg Ser Cys Asp Glu Lys Glu Lys Asp Phe Gly Gly Cys Arg Cys Gln
                325
                                    330
                                                         335
Ala Phe Met Leu Thr Gly Asn Ala Asp Asn Ala Asp Pro Val Cys Ser
            340
                                345
                                                   - 350
Lys Ser Pro His His Lys Ile Leu Glu Ala Arg Arg Glu Ala Ala
                            360
                                                 365
Cys Ser Asp Met Lys Ile Gly Gln Leu Gln Phe Arg Asn Arg Thr Arg
                        375
                                            380
Ser Gln Leu Ile Tyr Lys Thr Arg Glu Leu
                    390
                                        395
<210> 10273
<211> 155
<212> PRT
<213> Enterobacter cloacae
<400> 10273
Gln Gln Asp Arg Phe Arg Met Thr Asp Asn Asn Thr Ala Leu Lys Lys
                                    10
Ala Gly Leu Lys Val Thr Leu Pro Arg Leu Lys Ile Leu Glu Val Leu
                                25
Gln Gly Pro Asp Asn His His Val Ser Ala Glu Asp Leu Tyr Lys Arg
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Leu Ile Asp Met Gly Glu Glu Ile Gly Leu Ala Thr Val Tyr Arg Val
                        55
                                            60
Leu Asn Gln Phe Asp Asp Ala Gly Ile Val Thr Arg His Asn Phe Glu
                    70
                                        75
Gly Gly Lys Ser Val Phe Glu Leu Thr Gln Gln His His Asp His
                85
                                    90
Leu Ile Cys Leu Asp Cys Gly Lys Val Ile Glu Phe Ser Asp Asp Ser
                                105
Ile Glu Ser Arg Gln Arg Glu Ile Ala Ala Arg His Gly Ile Arg Leu
                            120
Thr Asn His Ser Leu Tyr Leu Tyr Gly His Cys Ala Glu Gly Asp Cys
                        135
Arg Glu Asn Glu His Ala His Asp Ala Lys
                    150
<210> 10274
<211> 80
<212> PRT
<213> Enterobacter cloacae
<400> 10274
Arg Arg Ile Ala Pro Val Leu Lys Leu Arg Lys Asn Pro Pro Glu
Lys Ile Glu Ala Phe Lys Ser Val Leu Asn Val Leu Lys Lys Glu Lys
Ala His Glu Gln Phe Ala Thr Gln Glu Asn Val Arg Val Met Asp Tyr
Gln Ala Cys Ile Gln Ala Arg Lys Thr Gly Asn Asp Gln Glu Val Ala
Lys Arg Cys Asp Lys Ile Trp Asn Glu Ile Arg Asn Asn Asn Lys
                    70
<210> 10275
<211> 141
<212> PRT
<213> Enterobacter cloacae
<400> 10275
Lys Ile Asp Ser Met Tyr Asn Leu Arg Met Tyr Ser Arg Ile Gly Arg
Arg Asn Pro Leu Tyr Ser Thr Ala Ile Gly Lys Val Leu Leu Ala Trp
Arg Asp Arg Glu Glu Val Lys Gln Ile Leu Asp Gly Val Glu Tyr Lys
                            40
Arg Ser Thr Asp Arg Thr Ile Thr Ser Thr Asp Glu Leu Leu Ser Val
Leu Asp Asn Val Arg Glu Gln Gly Tyr Gly Glu Asp Asn Glu Gln
                    70
                                        75
Glu Glu Gly Leu Arg Cys Ile Gly Val Pro Val Phe Asp Arg Phe Gly
                                    90
Val Val Ile Ala Gly Leu Ser Ile Ser Phe Pro Thr Leu Arg Phe Ser
            100
                                105
                                                    110
Glu Glu Arg Leu His Glu Tyr Val Ala Ile Leu His Thr Ala Ala Arg
                           120
Lys Ile Ser Glu Gln Met Gly Tyr Asn Asp Tyr Pro Phe
                        135
<210> 10276
<211> 119
<212> PRT
```

<213> Enterobacter cloacae

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<400> 10276
Thr Met Ala Thr Phe His Ile Ser Phe Lys Lys Leu Arg Arg Ser Glu
                                    10
Gly Lys Ser Ser Val Tyr Leu Ser Ala Tyr Gln Asn Arg Glu Lys Thr
                                25
Lys Asp Asn Arg Thr Gly Ala Thr Trp Asp Tyr Ser Lys Lys Glu Gly
                            40
Phe Phe Gly Ser Ala Ile Leu Ser Pro Ala Gly Thr Pro Ala Glu Leu
Val Lys Asp Ser Gly Thr Leu Trp Asn Ala Val Glu Ala Gly Glu Lys
Arg Lys Asp Ala Glu Leu Cys Arg Tyr Leu Asp Ile Ala Ile Pro Lys
Glu Leu Asp Asp Gly Gln Lys Lys Gln Ile Val Leu Asp Tyr Cys Gln
                                105
Glu Asn Phe Val Asp Tyr Ala
       115
<210> 10277
<211> 101
<212> PRT
<213> Enterobacter cloacae
<400> 10277
Met Arg Tyr Ile His Met Ser Glu Tyr Ile Lys Val Phe Leu Ala Leu
Cys Ser Phe Val Phe Thr Gly Thr Leu Ala His Ala Ala Ser Ser Gly
            20
Thr Ile Thr Phe Thr Gly Ser Val Asn Ser Glu Thr Cys Ala Ala Val
                                                 45
                            40
Val Asn Asn Gly Asn Ala Asp Ala Thr Val Thr Leu Pro Ala Val Pro
                        55
Thr Ser Ala Leu Ser Ala Ala Gly Ala Thr Ala Gly Ala Thr Thr Phe
Thr Ile Asn Leu Thr Gly Cys Glu Phe Tyr Pro Ser Gly Ala Lys Val
                                    90
Gln Arg Tyr Phe Gln
            100
<210> 10278
<211> 153
<212> PRT
<213> Enterobacter cloacae
<400> 10278
Ile Met Leu Ser Ala Ala Arg Gly Glu Asp Gln Met Asn Ile Pro Tyr
Arg Phe Ala Asp Asn Gly Gly Ala Leu Glu Val Pro Ala Asp Lys Val
                                25
His Glu Leu Arg Leu Arg Leu Ala Gln Gly Leu Pro Lys Gly Gly
                            40
Ala Val Gly Phe Glu Leu Leu Asp Gln Glu Lys Phe Gly Ile Ser Gln
                        5.5
Phe Ser Glu Gln Val Asn Tyr Gln Arg Ala Leu Glu Gly Glu Leu Ala
                    70
                                        75
Arg Thr Ile Glu Thr Leu Gly Pro Val Lys Ser Ala Arg Val His Leu
                                    90
Ala Met Pro Lys Pro Ser Leu Phe Val Arg Glu Gln Lys Ser Pro Ser
                                105
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Ala Ser Val Thr Val Asn Leu Glu Pro Gly Arg Ala Leu Val Ser Gly

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120
       115
                                                125
Gly Val Met Arg Leu His Glu Ser Pro Ile Ile Cys Ser Thr Ser Ala
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Ala Thr Ser Cys Pro Ala Arg Arg
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<210> 10279
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 10279
Pro Ser Asp Asn Ser Ala Met Leu Glu Lys Ala Ile Ala Ala Val Ala
Ala Ala Met Thr Asp Pro Ser Arg Val Lys Met Leu Cys Ala Leu Met
Asp Gly Arg Ala Trp Thr Ala Thr Glu Leu Ser Ala Ala Ala Asp Val
                            40
Ala Pro Ser Thr Ala Ser Gly His Leu Ala Arg Leu Val Glu Gly Gln
                        55
Leu Ile Thr Cys Leu Ser Gln Gly Arg His Arg Tyr Tyr Arg Leu Ala
                                        75
                    70
Gly His Asp Val Ala Ala Leu Val Glu Gln Met Met Gly Leu Ser Trp
                                    90
                85
Ser Arg Ile Thr Pro Pro Glu Thr Ser Ala Arg Pro Gly Ser Arg Leu
                                105
            100
Thr Val Thr Glu Ala Glu Gly Asp Phe Cys Ser Arg Thr Asn Arg Asp
                            120
Gly Leu Gly Ile Ala Arg Cys Thr Arg Ala Leu Phe Thr Gly Pro Lys
                        135
Val Ser Ile Val Arg Ala Ser Ser Pro Ser Ser Ala Arg Trp
                    150
<210> 10280
<211> 248
<212> PRT
<213> Enterobacter cloacae
<400> 10280
Arg Leu Leu Gly Lys Lys Glu Pro Thr Val Asn Ala Pro Val Arg Gly
Leu Tyr Met Trp Gly Gly Val Gly Arg Gly Lys Thr Trp Leu Met Asp
Met Phe Tyr Gln Ser Leu Pro Gly Thr Arg Lys Gln Arg Leu His Phe
                            40
His Arg Phe Met Leu Arg Val His Glu Glu Leu Thr Ala Leu Gln Gly
Glu Thr Asp Pro Leu Glu Ile Val Ala Asp Arg Phe Lys Ala Glu Thr
                                        75
Asp Val Leu Cys Phe Asp Glu Phe Phe Val Ser Asp Ile Thr Asp Ala
Met Leu Leu Gly Gly Leu Met Lys Ala Leu Phe Ala Arg Gly Ile Thr
            100
                                105
Leu Val Ala Thr Ser Asn Ile Pro Pro Asp Glu Leu Tyr Arg Asn Gly
                            120
                                                125
Leu Gln Arg Ala Arg Phe Leu Pro Ala Ile Asp Ala Ile Lys Gln His
                        135
                                            140
Cys Asp Ile Met Asn Val Asp Ala Gly Val Asp Tyr Arg Leu Arg Thr
                    150
                                        155
Leu Thr Gln Ala His Leu Trp Leu Ser Pro Leu Asn Ala Asp Thr Ala
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 Ser Glu Met Rap 180
 Leu Trp Leu Ala Leu Ala Gly Ala Pro Arg Asp 180

 Lys Ala Pro Ala Leu Glu Ile Asn His Arg Pro Leu Ser Thr Leu Gly 195

 Val Glu Asn Gln Thr Leu Ala Val Ser Phe Ala Thr Leu Cys Val Asp 210

 Ala Arg Ser Gln His Asp Tyr Gly Pro Leu Ser His Leu Gly Leu Asn 230

 Gln Pro Asp Arg Met Ile Tyr Gly 245

<210> 10281 <211> 113 <212> PRT

<213> Enterobacter cloacae

<400> 10281

 Trp
 Arg
 Asn
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 Arg
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<210> 10282 <211> 142 <212> PRT <213> Enterobacter cloacae

<400> 10282 Ile Pro Met Arg His Phe Pro Gly Leu Gly Ile Ile Ser Lys Leu Ile 10 Val Leu Phe Met Pro Ala Asp Ala Ser Met Ala Val Ile Pro Glu Leu 25 Thr Ser Val Pro Val Arg Ile Thr Leu Leu Val Ser Gly Ile Val Val Asn Ala Leu Ala Thr Gly Met Tyr Ile Gly Ala Gly Phe Gly Ala Gly Pro Arg Asp Gly Leu Met Thr Gly Ile His Ala Arg Leu Gly Trp Ser Ile Arg Ser Val Arg Thr Ala Ile Glu Val Thr Val Leu Ile Val Gly Tyr Leu Leu Gly Gly Ala Phe Gly Val Gly Thr Val Leu Tyr Ala Leu 105 110 100 Thr Ile Gly Pro Leu Ile Gln Leu Cys Leu Pro Trp Phe Arg Gln Arg 120 Pro Arg Ile Gln Lys Ala Ala Gln Pro Glu Arg Ile Val

135

<210> 10283 <211> 128

<212> PRT <213> Enterobacter cloacae

 Asn Ser Leu Cys Gly Asp Trp Gln Arg Ser Leu Met Met Ile Thr Met 1

 Ala Lys Asn Leu Gly Phe Ser Lys Ala Thr Leu Arg Lys Val Gly Ala 20

 Asn Ser Asp Gly Asp Gly Phe Leu Cys Phe Ala Ala His Gly Asn Ser 35

 Met Glu Pro Val Ile Ala Asp Gly Ser Thr Val Ala Ile Asn Cys His 50

 Asp Lys Arg Ile Val Asp Gly Lys Ile Tyr Gly Ile Asn Gln Gly Gly 65

 Trp Lys Arg Leu Lys Ile Leu Tyr Arg Ser Gly Pro Asp Lys Val Thr 85

 Ile Arg Ser Tyr Asn Ser Asp Glu Tyr Pro Asp Glu Glu Glu Val Asp Met 100

 Asp Ser Leu Glu Val Leu Gly Arg Leu Phe Trp Val Ser Thr Ile Phe 115

<210> 10284 <211> 430 <212> PRT

<213> Enterobacter cloacae

<400> 10284 Arg Phe Phe Gly Asp Ala Met Arg Gln Leu Gln Pro Lys Thr Asn Ala Val Phe Gly Gly Gln Tyr His Ile Ala Gly Arg Asp Val Thr Tyr Glu 20 Pro Ala Thr Gln Ala Asp Gly Gln Phe Ala Ala Lys Gly Glu Val Ile 40 Thr Ala Lys Trp Val Glu Ala Glu Gln Leu Phe Gly Cys Leu Arg Gln Phe Asn Gly Asp Val Ser Leu Gln Pro Gly Leu Val His Arg Ala Asn 70 75 Gly Gly Leu Leu Ile Ser Leu Arg Thr Leu Leu Ala Gln Pro Leu 90 Leu Trp Met Arg Leu Lys Thr Val Val Thr Gln Gln Arg Phe Asp Trp 105 Val Gly Tyr Asp Asp Ser Arg Pro Leu Pro Val Ser Ile Pro Ser Met 120 Pro Leu Ser Met Thr Val Val Leu Thr Gly Asp Arg Glu Ser Leu Ala 135 140 Asp Leu Gln Glu Met Glu Pro Glu Leu Ala Glu Gln Ala Val Tyr Ser 150 155 Glu Phe Glu Asp Asn Ile Gln Ile Ala Asp Ala Asp Asp Met Ala Gln 170 165 Trp Cys Gln Trp Val Met Ala Val Ala Glu Arg Phe Ala Leu Pro Ser 185 Pro Ala Glu Asp Ala Trp Pro Gly Leu Ile Arg Glu Ala Val Arg Tyr 200 Thr Gly Asp Gln Glu Thr Leu Pro Leu Cys Pro Leu Trp Ile Gly Lys 215 220 Gln Leu Arg Glu Val Gly Val Ile Ser Gly Asn Gly Pro Phe Thr Gly 230 235 Glu Gln Leu Ser Gln Met Leu Ala Gln Arg Glu Trp Arg Glu Gly Tyr 250 Leu Ala Asp Arg Met Gln Asp Glu Ile Leu Leu Glu Gln Ile Leu Val 265

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Glu Thr Glu Gly Glu Arg Ile Gly Gln Ile Asn Ala Leu Ser Val Ile
        275
                            280
Glu Phe Pro Gly His Pro Arg Ala Phe Gly Glu Pro Ser Arg Ile Ser
                        295
                                            300
Cys Val Val His Ile Gly Asp Gly Glu Phe Thr Asp Ile Glu Arg Lys
                    310
                                        315
Ala Glu Leu Gly Gly Asn Ile His Ala Lys Gly Met Met Ile Met Gln
                325
                                    330
Ala Phe Leu Met Ser Glu Leu Gln Leu Glu Gln Gln Ile Pro Phe Ser
                                345
Ala Ser Leu Thr Phe Glu Gln Ser Tyr Ser Glu Val Asp Gly Asp Ser
                            360
Ala Ser Met Ala Glu Leu Cys Ala Val Ile Ser Ala Leu Ala Asp Val
                        375
                                             380
Pro Ile Asn Gln Asn Ile Ala Ile Thr Gly Ser Val Asp Gln Phe Gly
                    390
                                        395
Arg Ala Gln Pro Val Gly Gly Leu Asn Glu Lys Ile Glu Gly Ser Ser
                405
                                    410
Gln Ser Ala Ser Ser Pro Thr Gly Ala Gly Arg Ser Cys Ala
            420
                                425
<210> 10285
<211> 343
<212> PRT
<213> Enterobacter cloacae
<400> 10285
Arg Arg Val Ser Pro Leu Cys Arg Leu Ser Asn Phe Ser Leu Gly Gln
                                    10
Arg Thr Leu Leu Lys Phe Cys Pro Val Cys Ala Arg Glu Asp Thr Phe
                                25
His Tyr Gly Val Thr Tyr Trp His Leu Ala His Gln Leu His Gly Val
        35
                            40
Thr Thr Cys His Arg His Pro Val Ala Leu Glu Ser Ile His Val Pro
Ser Ser Pro His Ile Arg Ile Gly Leu Met Pro Pro Val Ser Tyr Thr
                    70
Glu Gln Leu Ser Asn Glu Ile Asp Phe Asp Phe Ala Lys Phe Cys Tyr
                                    90
Glu Ser Leu Asn Ile Ile Arg Arg Lys Asp Ile Thr His Pro Asn Tyr
                                105
Met Asp Val Leu Lys Lys Leu Asn Leu Leu Ser Leu Asp Gly Asn Leu
                            120
                                                 125
Lys Lys Asn Val Phe Tyr Ala His Val Tyr Ala Lys Cys Gln Leu Phe
                        135
                                            140
Gly Glu Gly Ser Ser Gly Leu Ile Pro Thr Ser Leu Thr Asp Tyr His
                    150
                                        155
Tyr Trp Glu Pro Ile Leu Lys Asp Lys Cys Cys Gln His Pro Thr Lys
                                    170
                165
His Leu Leu Cys Tyr Cys Leu Leu Asn Thr Cys Trp Pro Thr Tyr
                                185
                                                    190
            180
Ala Gly Ser Arg Thr Asn Lys Lys Glu Ile Phe Lys Ser His Lys
                            200
                                                205
        195
Lys Tyr Ser Phe His Ile Val Glu Asn Asn Thr Ser Val Ser Asn Leu
                        215
                                            220
Gly Lys Glu Phe Ser Arg Ser Arg Cys Tyr Ile Lys Thr Leu Ile Tyr
                   230
                                        235
Lys Lys Tyr Leu Arg Ala Phe Lys Arg Asn Thr Lys Ile Asn Ile Phe
               245
                                    250
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Thr Glu Leu Leu Ile Lys Ser Met Ala Val Arg Gly Phe Ser Leu Ala 260 265 270 Ala

 Ser
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<210> 10286 <211> 82 <212> PRT <213> Enterobacter cloacae

<210> 10287 <211> 161 <212> PRT <213> Enterobacter cloacae

<400> 10287 Thr Glu Leu His Gly Asn Thr Glu Ile Ala Met Lys Tyr Gln Gln Leu Glu Asn Leu Glu Ser Gly Trp Lys Trp Lys Tyr Leu Val Lys Lys His 20 30 Arg Glu Gly Glu Leu Ile Thr Cys Tyr Ile Glu Ala Ser Ala Ala Gln 40 Glu Ala Val Asp Met Leu Leu Thr Leu Glu Asn Glu Pro Val Leu Val 55 Asn Gly Trp Ile Glu Lys His Ile Asn Pro Ala Leu Leu Asn Arg Met 70 75 Lys Gln Thr Ile Arg Ala Arg Arg Lys Arg His Phe Asn Ala Glu His 90 85 Gln His Thr Arg Lys Lys Ser Ile Asp Leu Glu Phe Met Val Trp Gln 105 Arg Leu Ala Gly Leu Ala Gln Arg Arg Gly Lys Thr Leu Ser Glu Thr 120 125 Val Val Gln Leu Ile Glu Asp Ala Glu His Lys Glu Lys Tyr Ala Ser 135 140 Gln Met Ser Thr Leu Lys Asn Asp Leu Gln Ala Leu Leu Gly Lys Lys

155

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<212> PRT
<213> Enterobacter cloacae
<400> 10288
Ile Ser Lys Gln Ile Lys Ile Ile Gly Glu Ala Ala Arg Arg Asp Tyr
                                    10
Asn Val Thr Glu Val Ala Asn Met Leu Tyr Thr Phe Pro Val Gly Pro
                                25
Gly Phe Gln Pro Arg Gly Asn Ile Pro Ala Ser His Gly Arg Arg Glu
                            40
Phe Arg Val Leu Glu Ile Phe Ile Pro Ser Ala Ala Ser Ala Cys Trp
Val
65
<210> 10289
<211> 274
<212> PRT
<213> Enterobacter cloacae
<400> 10289
Gly Ile Gly Asp Phe Tyr Pro Val Arg Gly Lys Arg Leu Leu Gly Met
                                    10
Thr Glu Pro Gly Lys Ala Leu Leu Thr Ile Ala Glu Arg Ile Leu Asn
            20
                                25
Glu Ala Gly Asn Val Arg Arg Leu Ala Asp Leu Phe Thr Asn Asp Ala
                            40
Ser Gly Val Met Thr Ile Ala Thr Thr His Thr Gln Ala Arg Tyr Ser
                        55
                                            60
Leu Pro Thr Val Ile Lys Ala Phe Arg Glu Ile Phe Pro Asp Val Arg
                    70
                                         75
Leu Glu Leu Ile Gln Gly Thr Pro Gln Glu Ile Glu Val Leu Met His
               85
                                     90
Asn Gly Gly Ala Asp Ile Gly Ile Ala Ser Glu Arg Leu Ser Asn Asp
            100
                                105
Pro Leu Leu Val Ala Phe Pro Trp Phe Arg Trp His His Ser Leu Leu
                            120
Leu Pro Ala Asp His Pro Leu Asn Gln Val Ser Pro Leu Thr Leu Glu
                        135
Glu Ile Val Lys Trp Pro Leu Ile Thr Tyr Arg Gln Gly Ile Thr Gly
                    150
                                         155
Arg Ser Arg Ile Asp Glu Ala Phe Lys Arg Lys Gly Leu Thr Pro Asp
                165
                                    170
Val Val Leu Ser Ala Gln Asp Ser Asp Val Ile Lys Thr Tyr Val Glu
                                185
Leu Gly Leu Gly Ile Gly Leu Val Ala Glu Gln Ser Gly Gly Glu Tyr
                            200
Glu Ala Gly Asn Leu Val Arg Leu Asp Thr Arg His Leu Phe Asp Ala
                        215
                                             220
Asn Thr Val Trp Leu Gly Leu Lys Arg Gly Gln Leu Gln Arg Lys Tyr
                    230
                                        235
Val Trp Arg Phe Ile Glu Leu Cys Asn Ala Gly Leu Ser Val Asp Glu
                245
                                    250
Ile Lys Arg Gln Val Met Glu Pro Glu Glu Val Ala Ile Asp Tyr Gln
                                265
Ile
<210> 10290
<211> 73
<212> PRT
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<213> Enterobacter cloacae <400> 10290 Asp Thr Val Glu Ser Met Val Arg Ala Leu Arg Thr Gly Asn Tyr Ser 10 Val Val Ile Gly Trp Leu Pro Glu Asp Leu Ser Gln Glu Glu His Leu 20 25 Arg Leu Thr Glu Ala Ala Glu Glu Gly Asn Ala Met Gly Phe Ile Met 40 45 Arg Pro Val Arg Gly Asp Ser Tyr Arg Arg Gly Gln His Pro Gly Leu 55 Lys Ile His Ser Asn Val Tyr His <210> 10291 <211> 142 <212> PRT <213> Enterobacter cloacae <400> 10291 Ile Thr Gln Ile Phe Met Glu Phe Ile Met Phe Lys Ser Ile Met Thr 10 Val Ser Leu Leu Ala Ala Ile Ala Ser Thr Ser Ala Val Ala Ala Asp Asn Ser Ala Gly Gly Ile Ile Asn Phe Thr Gly Ala Ile Thr Asp Thr Thr Cys Thr Ile Asn Gly Gly Lys Ser Ala Asp Phe Thr Val Ala 55 Leu Ser Pro Ile Ser Val Lys Asp Ala Gly Thr Thr Val Gly Leu Ile 70 75 Thr Lys Asn Lys Lys Ser Ile Ala Leu Thr Phe Ser Gly Cys Ser Pro 85 90 Ala Ala Gly Thr Thr Gly Thr Pro Leu Lys Val Tyr Phe Ser Ser Ala 100 105 Asp Asn Ile Ser Thr Asp Gly Lys Tyr Leu Leu Asn Asn Ser Val Asn 120 Glu Ser Asp Ala Ser Val Ala Arg Asn Val Gly Phe Ala Leu 130 135 <210> 10292 <211> 342 <212> PRT <400> 10292 Gly Ser Gly Pro Ala Leu Lys Pro Arg Leu Arg Ser Ile Gly Ala Ala

<213> Enterobacter cloacae

Val Asp Pro Arg Arg Asp Arg Pro Arg Ala Pro Val Thr Ala Arg Ile Gly Ala Arg Gly Val Pro Ala Arg Phe Asp Arg Thr Ser Thr His Arg Arg Gly Met Leu Ala Lys Val His Ile Ala Lys Val Gln Leu Gly Met Ser Asp Asp Tyr Val Ala Val Leu Leu Arg Ala Thr Gly Arg Thr 70 75 Ser Ala Ala Glu Cys Thr Asp Arg Glu Leu Asp Asp Ala Leu Arg Glu 85 90 Phe Lys Arg Leu Gly Phe Glu Pro Gln Ala Arg Ser Pro Lys Ala Ala 105 110 Lys Pro Ala Asp His Pro Leu Ala Leu Lys Ala Arg Ala Leu Trp Ile 120

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Ser Leu His His Leu Cys Ala Ile Ala Asp Pro Ser Glu Lys Ala Leu
                        135
                                            140
Glu Ala Phe Ala Arg Arg Gln Leu Gly Cys Asp Arg Leu Gln Trp Ala
                                       155
                    150
Asn Gln Ser Gln Gly His Arg Leu Ile Glu Ala Leu Lys Ala Ile Ala
                165
                                    170
Ala Arg His Gly Trp Asn Leu Ala Met Asp Gly Val Lys Pro Glu Ala
            180
                                185
Val Leu Ile Val Thr Lys Arg Arg Leu Val Asp Ala Ile Ala Arg Gln
                            200
Ala Ala Arg Ala Arg His Arg Ala Gly Arg Val Glu Arg Ala Glu Asp
                                            220
                        215
Arg Thr Ala Ala Asp Arg Asp Arg Gly Arg Leu Asp Pro Val Arg Asn
                    230
                                        235
Arg Arg Gly Thr Gly Pro His Arg Pro Gly Ala Pro Ala Pro Ser Cys
                245
                                    250
Gly Arg Arg Trp Arg Pro Gly Tyr Asp Arg Ala Arg His Pro Arg Ile
                                265
            260
Cys Arg Ala Val Ser Arg Ala Ala Ala Leu Pro Gly Met Trp Pro Leu
                            280
                                                285
Ala Leu Ala Gly Arg Thr Val Leu Gly Gly Met Arg Met Val Pro Pro
                        295
                                            300
Arg Ala Ala Pro Cys Ala Gly Arg Ala Gly Ala Asp Arg Gly Met Thr
                    310
                                        315
Thr Gln Thr Gln Ile Val Ser Arg Asn Glu Gln Ile Glu Glu Leu Ala
                                    330
                325
Ala Arg Pro Val Phe
            340
<210> 10293
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 10293
Cys Cys Leu Arg Val Leu Ala Ala Ala Arg Arg Pro Ala Val Phe Leu
                                    10
Ala Arg Val Leu Val Glu Arg Phe Pro Leu Cys Leu Gly Phe Leu Gly
            20
Leu Val Ser Phe Gly Ala Gly Gly Leu Tyr Ile Gly Leu Arg Thr Ile
                            40
Pro Val Ile Phe Asp Ile Ile Lys Asp Val Glu Asp Ile Cys Pro Asn
Ala Trp Val Ile Asn Phe Thr Asn Pro Ala Gly Met Val Thr Glu Ala
                                        75
Val Tyr Arg His Thr Gly Phe Lys Arg Phe Ile Gly Val Cys
<210> 10294
<211> 115
<212> PRT
<213> Enterobacter cloacae
<400> 10294
Ile Ala Phe Pro Ala Ser Pro Val Gly Leu Arg His Leu Lys Val Ser
                                    10
Val Ile Arg Phe Leu Val Phe Pro Val Cys Glu Phe Trp Leu Val Asp
                                25
Val Asp Asp Gly Leu Glu Leu Leu Ile Phe Phe Val Leu Cys Phe
                            40
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Arg Leu Val Asp Phe Ala Gly Val Pro Phe Ser Leu Leu Phe Ser Leu

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55
Val Arg Arg Leu Ala Leu Phe Asp Ala Val Phe Val Ser Ser Leu Leu
                     70
                                         75
Arg Val Gly Leu Leu Phe Phe Trp Arg Val Cys Trp Ser Ser Ala Phe
                                     90
                85
Arg Cys Ala Ser Val Phe Trp Ala Trp Phe Pro Ser Gly Leu Val Ala
                                 105
Cys Ile
         115
<210> 10295
<211> 229
 <212> PRT
 <213> Enterobacter cloacae
<400> 10295
Phe Ala Asn Gln Arg Glu Arg Gln Ser Leu Phe Phe Ser Thr Thr Phe
Glu Val Met Gly His Leu Thr Lys Ser Lys Gly Arg Val Thr Glu Ala
             20
                                 25
Asp Ile Gln Val Ala Ser Val Phe Met Asp Arg Met Asn Leu His Gly
         35
                             40
Glu Ser Arg Ile Ala Ala Gln Asn Ala Phe Arg Ile Gly Lys Ser Asp
                         55
Asn Tyr Pro Leu Arg Glu Lys Met Arg Gln Phe Arg Ser Ile Cys Phe
                     70
Gly Arg Phe Asp Leu Ile Arg Met Phe Leu Glu Ile Gln Ile Gln Ala
                 85
                                     90
Ala Phe Ala Asp Gly Ser Leu His Pro Asn Glu Arg Asp Val Leu Tyr
                                 105
             100
Val Ile Ala Glu Glu Leu Gly Ile Ser Arg Met Gln Phe Asp Gln Phe
                             120
Leu Arg Met Met Gln Gly Gly Ala Gln Phe Gly Gly Gly Tyr Gln Gln
                         1.35
                                             140
Gln His Ser Ser Gly Gly Trp Gln Gln Ala Gln Arg Gly Pro Thr Leu
                     150
                                         155
Glu Asp Ala Cys Asn Val Leu Gly Val Lys Pro Ser Asp Asp Val Thr
                                     170
Thr Ile Lys Arg Ala Tyr Arg Lys Leu Met Ser Glu His His Pro Asp
             180
                                 185
Lys Leu Val Ala Lys Gly Leu Pro Pro Glu Met Met Glu Met Ala Lys
                             200
Gln Lys Ala Gln Glu Ile Gln Lys Ala Tyr Glu Leu Ile Lys Glu Gln
Lys Gly Phe Lys
<210> 10296
<211> 193
<212> PRT
 <213> Enterobacter cloacae
<400> 10296
Ala Gly Val Asn Val Pro Asp Ser Val Phe Tyr Thr Ser Ala Met Ala
                                     10
Thr Ala Asp Phe Leu Lys Arg Gln Glu Gly Lys Lys Ala Tyr Val Val
                                 25
Gly Glu Gly Ala Leu Ile His Glu Leu Tyr Lys Ala Gly Phe Thr Ile
                             40
Thr Asp Val Asn Pro Asp Phe Val Ile Val Gly Glu Thr Arg Ser Phe
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Asn Trp Glu Met Met His Lys Ala Ala Tyr Phe Val Ala Asn Gly Ala 70 75 Arg Phe Ile Ala Thr Asn Pro Asp Thr His Gly Arg Gly Phe Tyr Pro 90 85 Ala Cys Gly Ala Leu Cys Ala Gly Ile Glu Lys Ile Ser Gly Arg Lys 100 105 Pro Phe Val Val Gly Lys Pro Ser Pro Trp Ile Ile Arg Ala Ala Leu 120 Asn Thr Met Gln Ala His Ser Glu Glu Thr Val Ile Val Gly Asp Asn · 135 Leu Arg Thr Asp Ile Leu Ala Gly Phe Gln Ala Gly Leu Glu Thr Ile 150 155 Leu Val Leu Ser Gly Val Ser Gln Leu Asp Asp Ile Asp Thr Met Pro 165 170 Phe Arg Pro Ser Trp Ile Tyr Pro Ser Val Asp Glu Ile Asp Val Ile 185

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<210> 10297
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<211> 115

<212> PRT <213> Enterobacter cloacae

<400> 10297

105

Pro Glu

115

<210> 10298

<211> 228

<212> PRT

<213> Enterobacter cloacae

100

<400> 10298

 Arg
 Leu
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 Thr
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100
                                105
                                                    110
Ala Ile Pro Phe Leu Leu Gly Lys Phe Phe Phe Ser Leu Asp Ile Tyr
                           120
                                               125
Tyr Asn Phe Val Glu Gly Gln Gly Arg Phe Lys Asp Tyr Ala Ile Ser
                      135
                                           140
Lys Phe Phe Ser Leu Thr Leu Ile Asn Gly Phe Arg Leu Tyr Cys Val
                   150
                                       155
Val Gln Lys Leu Asp Val Phe Trp Val Ala Val Ser Tyr Phe Leu Thr
                                   170
Asp Phe Leu Thr Phe Phe Met Tyr Phe Ile Phe Tyr Asp Lys Leu Lys
                                185
Leu Leu Gly Phe Arg Phe Asn Tyr Lys Lys Ser Leu Val Leu Leu Lys
                            200
Ile Asn Tyr Lys Leu Ala Leu Ser Ser Leu Arg Arg Cys Arg Ser Arg
                        215
                                            220
Asp Ile Thr Ser
225
<210> 10299
<211> 198
<212> PRT
<213> Enterobacter cloacae
<400> 10299
Pro Ile Ala Arg Leu Val Gln Asp Tyr Pro Ile Lys Ser Cys Ser Val
Ile Ala His Ile Arg Gln Ala Asn Arg Gly Glu Val Ala Leu Glu Asn
           20
Thr His Pro Phe Thr Arg Glu Leu Trp Gly Arg Asn Trp Thr Tyr Ala
His Asn Gly Gln Leu Ser Gly Tyr Lys Ser Leu Glu Thr Gly Asn Phe
                        55
Arg Pro Val Gly Glu Thr Asp Ser Glu Lys Ala Phe Cys Trp Leu Leu
                    70
His Lys Leu Thr Glu Arg Tyr Pro Arg Thr Pro Gly Asn Met Thr Ala
                                    90
Val Phe Lys Tyr Ile Ala Ser Leu Ala Ser Glu Leu Arg Glu Lys Gly
           100
                                105
Val Phe Asn Met Leu Leu Ser Asp Gly Arg Tyr Val Met Ala Phe Cys
       . 115
                            120
Ser Thr Asn Leu Phe Trp Ile Thr Arg Arg Ala Pro Phe Gly Val Ala
                       135
                                            140
Thr Leu Leu Asp Gln Asp Val Glu Ile Asp Phe Gln Lys Glu Thr Thr
                   150
                                        155
Pro Asn Asp Val Val Thr Val Ile Ala Thr Gln Pro Leu Thr Gly Asn
               165
                                    170
Glu Thr Trp Gln Lys Ile Met Pro Gly Glu Trp Ala Leu Phe Cys Leu
           180
                                185
Gly Asp Arg Val Ile
       195
<210> 10300
<211> 329
<212> PRT
<213> Enterobacter cloacae
<400> 10300
Thr Leu Ile Phe Gln Pro Pro Cys Val Lys Ile Leu Phe Leu Ala Ser
                                   10
Leu Leu Phe Met Ala Pro Ala Ala Phe Ala Ala Thr Trp Pro Leu
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Thr Ile Glu Asn Cys Gly Val Lys Gln Thr Phe Thr Gln Ala Pro Gln
                            40
Arg Val Val Thr Val Gly Gln His Glu Thr Glu Leu Leu Ala Leu
                        55
                                            60
Gly Leu Glu Lys Thr Ile Ala Ala Thr Ser Val Trp Phe Gly Thr Leu
                   70
                                        75
Pro Pro Thr Leu Glu Asp Ala Gly Lys Asn Leu Pro Arg Leu Ala Asp
               85
                                    90
Tyr Ser Pro Ser Phe Glu Ala Val Val Gly Gln Lys Pro Glu Leu Val
                                105
Leu Ala Gln Tyr His Trp His Ile Gly Pro Gln Gly Glu Val Gly Thr
                            120
Arg Glu Gln Phe Ala Ser Leu Gly Ile Asn Thr Trp Ile Ser Pro Ala
                        135
                                            140
Asp Cys Thr Asp Lys Thr Val Thr Glu Thr Ser Asn Ala Asp Gly Ala
                   150
                                        155
Arg Ser Ala Pro Phe Ser Leu Ala Glu Ile Thr Arg Glu Val Thr Asp
                                    170
                165
Leu Ala Thr Ile Phe Asp Val Ser Ala Arg Gly Glu Gln Leu Asn Arg
                                185
            180
Ala Leu Ala Glu Arg Ile Lys Lys Ala Gln Ala Arg Ala Ser Ala Lys
                            200
                                                205
Gln Leu Ser Val Val Phe Trp Phe Ser Ser Arg Leu Asn Gly Asp
                        215
                                            220
   210
Pro Trp Val Ala Gly Asn Tyr Gly Ala Pro Gly Trp Ile Ser Arg Thr
                    230
                                        235
Leu Gly Leu Lys Asn Ile Ile Asp Ser His Asp Glu Trp Pro Ala Val
                                    250
                245
Thr Trp Glu His Ile Ala Arg Ser Gln Pro Asp Val Ile Val Ile Ala
            260
                                265
Gly Met Ser Arg Arg Leu Tyr Pro Ala Asp Glu Val Glu Val Lys
       275
                            280
                                                285
Ala Phe Leu Arg Ser Asp Pro Val Thr Lys Asn Met Pro Ala Val Arg
                        295
                                            300
Asn Asn His Ile Ile Val Val Pro Ala Met Ser Leu Asn Pro Ser Leu
                    310
                                        315
Arg Asn Val Asp Ala Val Glu Leu Ile
                325
```

```
<210> 10301
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<400> 10301

<sup>&</sup>lt;211> 74

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<sup>&</sup>lt;210> 10302

<sup>&</sup>lt;211> 345

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
<400> 10302
Pro Lys Arg Arg Pro Ser Gly Ala Met Glu Leu Asp Asn Ala Asn Asn
                                    10
Val Gly Gly Tyr Pro Gly Tyr Ser Ile Thr Asn Leu Ala Pro Phe Leu
                                25
            20
Gln Ala Arg Tyr Asp Ile Asp Ala Ile Thr Leu Ser Gly Gly Val Arg
                            40
                                                 45
Tyr Gln Tyr Thr Glu Asn Lys Val Asp Asp Phe Val Gly Tyr Ala Gln
                        55
Gln Gln Ala Ile Ala Thr Gly Lys Ala Thr Ser Ala Asp Ala Val Pro
                    70
                                        75
Gly Gly Lys Thr Asp Tyr Asn Asn Phe Leu Phe Asn Ala Gly Ile Leu
                                    90
Gly Arg Leu Thr Glu Gln Gln Leu Trp Phe Asn Phe Ser Gln Gly
                                105
Phe Glu Ile Pro Asp Leu Ala Lys Tyr Tyr Gly Ser Gly Thr Tyr Gln
                            120
Leu Val Asp Gly His Tyr Arg Leu Gln Asn Ser Val Asn Val Asn Asp
                        135
                                            140
Ser Thr Leu Asp Gly Ile Lys Val Asn Ala Tyr Glu Leu Gly Trp Arg
                    150
                                        155
Phe Thr Gly Asp Asn Leu Arg Thr Gln Val Ala Ala Tyr Tyr Ser Leu
                                    170
                165
Ser Asp Lys Thr Ile Thr Ile Asn Lys Ser Asp Met Thr Ile Asn Leu
            180
                                185
Glu Asp Asp Lys Arg Arg Ile Tyr Gly Val Glu Gly Gln Val Asp Tyr
                            200
        195
                                             . 205
Phe Phe Thr Asp Ser Asp Trp Ser Thr Gly Ala Asn Phe Asn Ala Ile
                        215
                                             220
Lys Ser Glu Thr Arg Glu Asn Gly Lys Trp Glu Lys Leu Thr Val Asp
                    230
                                        235
Ser Ala Ser Pro Ser Lys Ala Ser Ala Trp Val Asn Trp Ala Pro Gly
                245
                                    250
Asp Trp Thr Leu Arg Val Gln Ser Thr Gln Thr Phe Asp Val Ser Asp
            260
                                265
Ala Asp Gly Lys Lys Ile Asp Gly Tyr Asn Thr Val Asp Phe Leu Gly
        275
                            280
                                                 285
Ser Tyr Ala Leu Pro Val Gly Lys Val Ser Phe Ser Val Glu Asn Leu
                        295
                                             300
Leu Asp Lys Asp Tyr Thr Thr Ala Trp Gly Gln Arg Ala Pro Gly Leu
                                        315
                    310
Tyr Ser Pro Thr Tyr Gly Ala Pro Gly Leu Ser Thr Tyr Val Phe Ser
                325
                                    330
Thr Arg Arg Pro Arg Ile Arg Arg Lys
            340
<210> 10303
<211> 205
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(205)
<400> 10303
Arg Asn Asn Lys Ile Gln Arg Met Lys Lys Arg Ile Pro Thr Leu Leu
                                    10
```

Asp Thr Met Ile Gly Thr Ala Leu Tyr Ser Gln Gln Gly Leu Ala Ala 20 25 30 Asp Leu Ala Ser Gln Cys Met Leu Gly Val Pro Ser Tyr Asn Arg Pro

```
40
                                                 45
Leu Val Lys Gly Asp Thr Asn Asp Leu Pro Val Thr Ile Asn Ala Asp
                        55
                                             60
Ser Ala Lys Gly Asn Tyr Pro Asp Asn Ala Thr Phe Thr Gly Asn Val
                    70
                                        75
Asp Ile Asn Gln Gly Asn Ser Arg Leu Leu Ala Asp Glu Val Gln Leu
                85
                                    90
His Gln Lys Gln Pro Glu Gly Ala Gln Ala Pro Val Arg Thr Val Asp
            100
                                105
Ala Leu Gly Asn Val His Tyr Asp Asp Asn Gln Val Ile Leu Lys Gly
                            120
Pro Lys Ala Trp Ser Asn Leu Asn Thr Lys Asp Thr Asn Val Trp Glu
                        135
Gly Asp Tyr Gln Met Val Gly Arg Gln Gly Arg Gly Thr Ala Asp Leu
                    150
                                        155
Met Lys Gln Arg Gly Glu Asn Arg Tyr Thr Ile Leu Glu Asn Gly Thr
                165
                                    170
Phe Thr Ser Cys Leu Pro Arg Ser Asn Thr Trp Ser Val Val Gly Ser
                                185
            180
Glu Val Ile His Asp Arg Glu Glu Gln Val Ala Glu Xaa
<210> 10304
<211> 122
<212> PRT
<213> Enterobacter cloacae
<400> 10304
Val Glu Thr Thr Lys Leu Trp Ile Ser'Leu Gly Thr Ile Val Ser Pro
                                    10
Ile Thr Gly Thr Phe Phe Thr Lys Ile Ile Thr Gln Tyr Asn His Lys
                                25
Tyr Leu Leu Trp Tyr Asn Gly Glu Tyr Leu Ile Lys Pro Gly Asp Asn
                            40
Ile Lys Val Asn Asn Asn Gly Ile Val Ile Ser Glu Lys Leu Arg Lys
    50
                        55
                                             60
Ile Asn Ile Ile Gln Ile Asp Lys Tyr Ser Pro Thr Leu Trp Arg Val
                    70
                                        75
Met His Asn Met Ser Ser Cys Pro Gly Asp Lys Glu Pro Glu Asn Ser
                                    90
                85
Phe Cys Thr Ser Ser Val Arg Cys Ile Phe Lys Thr Cys Pro Tyr Gly
            100
                                105
Lys Lys Arg Arg Asn Ala Cys Lys Arg
        115
<210> 10305
<211> 267
<212> PRT
<213> Enterobacter cloacae
<400> 10305
Asp Ser Gly His Tyr Asn Lys Ser Leu Gly Trp Leu Ser Leu Phe Ala
                                    10
Gly Thr Val Leu Leu Ser Gly Cys Asp Ser Ala Leu Leu Asp Pro Lys
                                25
Gly Gln Ile Gly Leu Glu Gln Arg Ser Leu Ile Leu Thr Ala Phe Gly
                            40
Leu Met Leu Ile Val Val Ile Pro Ala Ile Leu Met Ala Val Gly Phe
Ala Trp Lys Tyr Arg Ala Ser Asn Lys Asp Ala Lys Tyr Ser Pro Asn
                                        75
```

```
Trp Ser His Ser Asn Lys Val Glu Ala Val Val Trp Thr Val Pro Ile
                85
                                    90
Leu Ile Ile Leu Phe Leu Ala Val Leu Thr Trp Lys Thr Thr His Ala
            100
                                105
Leu Glu Pro Ser Lys Pro Leu Val His Asp Glu Lys Pro Ile Thr Ile
                            120
Glu Val Val Ser Met Asp Trp Lys Trp Phe Phe Ile Tyr Pro Glu Gln
                        135
                                            140
Gly Ile Ala Thr Val Asn Glu Ile Ala Phe Pro Ala Asn Thr Pro Val
                    150
                                        155
Gln Phe Lys Val Thr Ser Asn Ser Val Met Asn Ser Phe Phe Ile Pro
                                    170
Arg Leu Gly Ser Gln Ile Tyr Ala Met Ala Gly Met Gln Thr Asn Leu
                                185
His Leu Ile Ala Asn Glu Ala Gly Thr Tyr Asp Gly Ile Ser Ala Ser
                            200
Tyr Ser Gly Pro Gly Phe Ser Gly Met Lys Phe Lys Ala Ile Ala Thr
                        215
                                            220
Pro Asp Arg Ala Thr Phe Asp Gln Trp Val Ala Lys Ala Lys Gln Ser
                    230
                                        235
Thr Asn Thr Met Ser Asp Met Ala Ala Phe Glu Lys Val Ala Ala Pro
                                    250
                245
Ser Glu Tyr Asn Lys Gly Gly Val Leu Leu
            260
<210> 10306
<211> 147
<212> PRT
<213> Enterobacter cloacae
<400> 10306
Pro Ala Thr Gly Leu Phe Pro Gln Trp Ser Arg Cys Pro Gly Thr Gly
                                    10
Gly Val Asp Leu Arg Gln Ser Gly Ala Ile Leu Met Lys Arg Val Ala
            20
                                25
Phe Val Phe Thr Ser Ala Pro His Gly Ser Ala Ser Gly Arg Glu Gly
                            40
Leu Asp Ala Leu Leu Ala Thr Ser Ala Leu Thr Glu Asp Ile Gly Val
                        55
Phe Phe Leu Gly Asp Gly Val Phe Gln Leu Leu Ala Gly Gln Gln Pro
                    70
                                        75
Gln Ala Ile Leu Ala Arg Asp Tyr Ile Ala Thr Phe Lys Val Leu Pro
                                    90
Leu Tyr Asp Ile Glu Thr Phe Tyr Val Cys Ala Asp Ser Leu Ala Ala
                                105
Arg Gly Leu Asn Glu Lys Thr Pro Phe Val Leu Asp Val Thr Ile Leu
                            120
Thr Ser Ala Ala Leu Arg Glu Gln Leu Ser His Tyr Asp Thr Val Leu
Thr Phe
145
<210> 10307
<211> 147
<212> PRT
<213> Enterobacter cloacae
<400> 10307
Ile Ile Pro Pro Gly Ser Lys Ser Gly Asp Phe Ser Trp Asp Lys Thr
               5 ---
                                    10
```

Ser Asn Ala Phe Cys Val Asn Gly Asp Gly Pro Arg Arg Thr Val Pro

20 25 Ser Arg Ala Ser Ser Ala Val Gln Phe Ala His Ala Leu Leu Asp Ala 40 Gly His Glu Leu Ala Ser Val Phe Phe Tyr Arg Glu Gly Val Tyr Asn 55 60 Ala Asn Gln Phe Thr Ser Pro Ala Ser Asp Glu Phe Asp Leu Val Arg 70 75 Ala Trp Gln Lys Leu Asn Glu Thr Gln Gly Val Asp Leu His Ile Cys 85 90 Val Ala Ala Leu Arg Arg Gly Val Thr Asp Ala Thr Glu Ala Glu 105 Arg Leu Gly Leu Ala Gly Ala Asn Leu Gln Pro Gly Phe Ser Leu Ser 120 Gly Leu Gly Ala Leu Ala Gln Ala Ala Leu Thr Cys Asp Arg Val Val Gln Phe 145 <210> 10308 <211> 205 <212> PRT <213> Enterobacter cloacae <400> 10308 His Lys Leu Asp Arg Gln Ala Arg Gly Glu Leu Arg Ile Ile Phe Ile Leu Leu Ser Asp Val Phe Asn Leu Tyr Arg Asp Ser His Val Lys Tyr Gln Gln Ser Tyr Gln Asn Ser Ile Arg Asp Pro Leu Thr Arg Leu 40 Tyr Asn Arg Ser Tyr Phe Tyr Asp Ser Leu Asn His Ala Leu Asn Thr 55 60 Ala Thr Val Thr His Pro Val Ser Val Val Ser Asp Leu Asp Arg 70 75 Phe Lys Arg Ile Asn Asp Cys Tyr Gly His Leu Gln Gly Asp Arg Val 90 Leu Gln Phe Val Ser Asn Leu Leu Thr Asp Ser Val Arg Pro Gln Asp 105 Ile Ala Ala Arg Ile Gly Gly Glu Glu Phe Val Leu Met Leu Thr Asn 120 Thr Pro Ser Asp Val Ala His Gln Val Ala Glu Arg Ile Arg Leu Lys 135 140 Leu Ser Gly Phe Asp Lys Ala Ser Ser Gly Gly Gln Leu Pro Glu Pro 150 155 Ile Thr Ile Ser Met Gly Val Phe Thr Ala Thr Ser Pro Glu Thr Ser 165 170 Ala Glu Thr Cys Val Glu Ser Ala Asp Lys Ala Met Tyr Glu Ala Lys 180 185 Glu Thr Gly Arg Asn Arg Val Val Phe Arg Thr 200 <210> 10309 <211> 130 <212> PRT <213> Enterobacter cloacae <400> 10309 Arg Arg Ala Leu Ile Asp His Arg Leu Lys Pro Leu Glu Leu Thr Gln 10 Thr His Trp Val Thr Leu His Asn Ile His Gln Leu Pro Pro Asp Gln

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Ser Gln Ile Gln Leu Ala Lys Ala Ile Gly Ile Glu Gln Pro Ser Leu
                            40
Val Arq Thr Leu Asp Gln Leu Glu Glu Lys Gly Leu Ile Ser Arg Gln
                        55
                                             60
Thr Cys Ala Ser Asp Arg Arg Ala Lys Arg Ile Lys Leu Thr Glu Lys
                    70
                                        75
Ala Ala Pro Ile Ile Thr Glu Met Glu Thr Val Ile Ser Lys Thr Arg
                                    90
Gly Glu Ile Leu Ala Gly Ile Ser Pro Ala Glu Leu Glu Met Leu Ile
                                105
Gly Leu Ile Ala Arg Leu Glu Gln Asn Ile His Asp Leu Gln Ser Arg
                            120
Asp
    130
<210> 10310
<211> 156
<212> PRT
<213> Enterobacter cloacae
<400> 10310
Arg Leu Glu Gly Ser Lys Thr His Arg Glu Trp Arg Val Pro Val Val
Arg Gln Leu Arg Leu Arg Leu Gln Leu Leu Ser Arg Ala Thr Glu
                                25
Ala Gly Ala Gly Pro Lys Asp Asn Leu Phe Asp Val Ser Phe Tyr Ile
Ala Gly Arg Lys Ala Lys Phe Glu Arg Asn Asp Val Ser Val Met His
Gln Lys Ile Arg Ser Phe Phe Arg Arg Leu Ser Lys Glu Cys Gly Phe
Ala Val Ser Pro His Arg Phe Arg His Thr Leu Ala Thr Glu Leu Met
                                    90
Lys Ala Pro Glu Arg Asn Leu Gln Leu Val Lys Asp Leu Leu Gly His
            100
                                105
Arg Ser Val Ser Thr Thr Met Glu Tyr Val Glu Leu Arg Met Asp Ile
                            120
Val Gly Lys Thr Leu Glu Glu Glu Leu Ser Leu His Thr Asp Leu Cys
                        135
Val Glu Arg Glu Leu Gln Leu Leu Thr Gln Asn
                    150
<210> 10311
<211> 134
<212> PRT
<213> Enterobacter cloacae
<400> 10311
Ser Trp Asn Pro Asn Glu Leu Leu Thr Gly Lys Thr Glu Cys Asn Lys
Cys Glu Glu Ala Ser Pro Gly Asn Val Thr Leu Lys Thr Ile Glu Gly
Val Val Arg Asn Val Pro Phe Tyr Gly Glu Ile Ala Gly Ser Arg Val
                            40
                                                 45
Lys Lys Gly Pro Trp Trp Leu Ile Ile Leu Lys Arg Trp Leu Gln Lys
                        55
Ser Leu Thr Arg Gly Phe Ser His Phe Asn Pro Asp Gln Tyr Asn Gly
                    70
                                        75
Ala Cys Leu Leu Gly Leu Arg Gly Ile Val Ile Lys Ser His Gly Ala
Ala Asn Gln Arg Ala Phe Thr Val Ala Ile Glu Gln Ala Val Gln Ala
```

100 105 110 Val Gln Arg Gln Val Pro Gln Arg Ile Ala Ala Arg Leu Gly Ser Val 120 Leu Ala Lys Ser Asp 130 <210> 10312 <211> 173 <212> PRT <213> Enterobacter cloacae <400> 10312 Ala Tyr Met Tyr Thr Lys Ile Leu Gly Thr Gly Ser Tyr Leu Pro Lys Gln Val Arg Thr Asn Ala Asp Leu Glu Lys Met Val Asp Thr Ser Asp Glu Trp Ile Val Thr Arg Thr Gly Ile Arg Glu Arg Arg Ile Ala Ala 40 Pro Asp Glu Thr Val Ser Thr Met Gly Tyr Glu Ala Ala Gln Arg Ala Leu Glu Met Ala Gly Ile Asp Lys Glu Gln Ile Gly Leu Ile Val Val Ala Thr Thr Ser Ala Thr His Ala Phe Pro Ser Ala Ala Cys Gln Val Gln Asn Met Leu Gly Ile Lys Gly Cys Pro Ala Phe Asp Val Ala Ala 105 Ala Cys Ala Gly Phe Thr Tyr Ala Leu Ser Ile Ala Asp Gln Tyr Val 120 Lys Ser Gly Ala Val Lys Tyr Ala Leu Val Ile Gly Ala Asp Val Leu 135 140 Ala Arg Thr Cys Asp Pro Thr Asp Arg Gly Thr Ile Ile Ile Phe Gly 150 Asp Val Leu Pro Ser Pro Trp Lys Ile Arg Ile Cys Val 165 <210> 10313 <211> 263 <212> PRT <213> Enterobacter cloacae <400> 10313 Gln Val Thr Val Thr Asn Asp Asn Gly Lys Leu Asp Ile Arg Leu Thr 10 Gly Pro Trp Arg Glu. Val Ile Met Trp Glu Val Pro Leu Leu Ala Val 25 Ile Ser Glu Leu Ala His Arg Tyr Arg Ser Pro Glu Thr Gly Val Thr 40 Gln Ala Val Ala Ala Leu Glu Asn Lys Leu Val Glu Phe Ser Arg Leu 55 60 Thr Glu Gly Leu Asp Met Ser Arg Phe Arg Leu Met Asp Phe Gly Thr 75 70 Arg Arg Arg Phe Ser Arg Glu Val Gln Glu Ala Ile Val Arg Arg Leu 85 90 Gln Glu Pro Trp Phe Val Gly Thr Ser Asn Tyr Asp Leu Ala Arg 105 Arg Leu Asp Leu Thr Pro Met Gly Thr Gln Ala His Glu Trp Phe Gln 120 Ala His Gln Gln Ile Ser Pro Asp Leu Ala Asn Ser Gln Arg Ala Ala 135 Leu Ala Ala Trp Leu Glu Glu Tyr Pro Asp Arg Leu Gly Ile Ala Leu

Thr Asp Cys Ile Thr Met Asp Ala Phe Leu Arg Asp Phe Gly Pro Glu 165 170 Phe Ala Glu Arg Tyr Gln Gly Leu Arg His Asp Ser Gly Asp Pro Val 180 185 Glu Trp Gly Glu Lys Ala Ile Ala His Tyr Glu Lys Leu Gly Ile Asp 195 200 205 Pro Met Ser Lys Val Leu Val Phe Ser Asp Asn Leu Asp Leu Ser Lys 215 220 Ala Val Asp Leu Tyr Arg His Phe Ser Ser Arg Val Asn Leu Ser Phe 230 235 Gly Ile Gly Thr Arg Leu Thr Cys Asp Ile Pro Gln Val Lys Pro Leu 250 245 Asn Ile Val Ile Lys Leu Val 260

<210> 10314 <211> 174

<212> PRT

<213> Enterobacter cloacae

<400> 10314

Thr Ser Asp Gln Thr Val Thr Gln Lys Gln Gln Ile Glu Glu Ala 10 Gly Tyr Gln Val Ser Lys Cys Phe Thr Asp Glu Ala Val Ser Gly Gly 20 25 Ile Lys Asp Thr Glu Arg Lys Gly Phe Ser Asp Leu Leu Asn Tyr Val 35 40 Arg Glu Gly Asp Thr Leu Val Val Ile Gly Ile Asp Arg Leu Gly Arg 55 Asn Thr Ile Asp Val Leu Ser Thr Val Glu Thr Leu Gln Ala Lys Gly 70 75 Val Lys Val Ile Ser Leu Arg Glu Gly Phe Asp Leu Ser Thr Pro Val 85 90 Gly Lys Ala Met Leu Thr Met Met Ala Gly Leu Ala Ser Leu Glu Lys 100 105 Asp Leu Ile Ala Glu Arg Arg Thr Ala Gly Ile Lys Arg Ala Gln Ser 120 Glu Gly Val His Cys Gly Arg Pro Ile Lys Ala Thr Thr Glu Gln Val 130 135 140 Gln Glu Leu Ile Ala Gln Gly Tyr Phe Pro Ala Gln Val Gln Glu Glu 150 155 Leu Gly Ile Ser Lys Ala Thr Phe Tyr Arg Leu Asn Lys 165 170

<210> 10315 <211> 217 <212> PRT

<213> Enterobacter cloacae

<400> 10315

```
85
                                    90
Leu Ile Leu Gly Trp Glu Phe Ser Val Phe Ala Thr Pro Gly His Thr
                               105
            100
                                                   110
Ser Gly His Leu Cys Leu Tyr Ser Lys Pro Tyr Leu Phe Cys Gly Asp
                           120
       115
                                               125
Thr Leu Phe Ser Gly Gly Cys Gly Arg Leu Phe Glu Gly Thr Pro Glu
                        135
                                           140
Gln Met Tyr Gln Ser Leu Gln Lys Ile Asn Ala Leu Pro Ala Asp Thr
                   150
                                        155
Val Ile Cys Cys Ala His Glu Tyr Thr Leu Gly Asn Met Lys Phe Ala
                                    170
Ala Ser Val Leu Pro Glu Asp Arg Ala Ile Gln Asp Tyr Tyr Leu Lys
                                185
Val Lys Glu Leu Arg Ala Lys Asn Leu Lys Thr Leu Pro Val Met Ser
                            200
Ser Leu Gln Arg Ala Arg Ser His
<210> 10316
<211> 140
<212> PRT
<213> Enterobacter cloacae
<400> 10316
Asp Ser Cys Ile Thr Ser Tyr Ser Val Ala Gly Val Leu Met Lys Pro
                                    10
Ala Arg Ile Pro Gln Thr Val Ala Pro Pro Glu Arg Trp Ala Glu Leu
            20
                                25
Pro Trp Gly Glu Tyr Tyr Arg Glu Ala Leu Glu Leu Gln Leu Lys Pro
       35
                            40
Trp Leu Ala Lys Met Asn Gly Phe His Leu Leu Lys Ile Gly Asn Leu
                        55
                                            60
Ser Ala Glu Ile Asn Thr Glu Ser Cys Ala Ile Ser His Gln Val Ser
                    70
                                        75
Val Ser Leu Asn Gly Ser Pro Val Gln Val Lys Ala Asp Pro Met His
                85
                                    90
Leu Pro Phe Ala Glu Lys Ser Ile Asp Ala Cys Leu Leu Ala His Thr
            100
                                105
Leu Pro Trp Cys Ser Asp Pro His Arg Leu Leu Arg Glu Ala Asp Arg
                            120
Pro Leu Ile Val Val Asp Gln Pro Val Asp Trp
   130
                        135
<210> 10317
<211> 283
<212> PRT
<213> Enterobacter cloacae
<400> 10317
Ser Gln Ala Phe Val Arg Asn Tyr Gly Tyr Glu Leu Ala His Arg Val
                                    10
Ile Cys Ala Leu Arg Ala Ala Leu Val Glu Lys Ser Met Asn Asp Glu
                                25
Met Lys Asn Lys Ser Gly Lys Val Lys Val Met Tyr Val Arg Ser Asp
                            40
Asp Asp Ser Asp Lys Arg Thr Gln Asn Pro Arg Thr Gly Lys Gly Gly
                        55
                                            60
Gly Arg Pro Ala Ser Ser Arg Ala Asp Gly Gly Arg Arg Pro Ala Arg
                   70
                                        75
Asp Asp Arg Asn Asn Arg Gly Asp Asp Arg Lys Arg Asp Asp Arg Lys
```

```
Arg Asp Asp Arg Lys Arg Asp Phe Val Arg Asp Gly Gly Ser Pro
            100
                                105
Trp Arg Thr Val Ser Arg Ala Pro Gly Glu Glu Thr Thr Glu Lys Ala
                            120
Asp His Gly Gly Ile Ser Gly Lys Ser Phe Ile Asp Pro Glu Val Leu
                        135
                                            140
Arg Arg Gln Arg Ala Glu Glu Thr Arg Val Tyr Gly Glu Asn Ala Cys
                    150
                                        155
Gln Ala Leu Phe Gln Ser Arg Pro Glu Cys Ile Val Arg Ala Trp Phe
                                    170
                165
Ile Gln Ser Val Thr Pro Arg Phe Lys Glu Ala Leu Arg Trp Met Ala
            180
                                185
Ala Asn Arg Lys Ala Tyr His Val Val Asp Asp Ala Glu Leu Thr Lys
                            200
                                                205
        195
Ala Ser Gly Thr Glu His His Gly Gly Val Cys Phe Leu Ile Lys Lys
                        215
                                             220
Arg Asn Gly Thr Thr Val Gln Gln Trp Val Ser Gln Ala Asp Ala Asp
                    230
                                        235
Asp Cys Val Leu Ala Leu Glu Asp Val Gly Asn Pro His Asn Leu Gly
                245
                                    250
Ala Met Met Arg Ser Cys Ala His Phe Gly Val Lys Gly Val Leu Leu
                                265
            260
Gln Asp Ala Ala Leu Leu Glu Ser Gly Ala Ala
        275
                            280
<210> 10318
<211> 143
<212> PRT
<213> Enterobacter cloacae
<400> 10318
Met Lys Thr Phe Thr Ala Lys Pro Glu Thr Val Gln Arg Asp Trp Tyr
Val Val Asp Ala Thr Gly Lys Thr Leu Gly Arg Leu Ala Thr Glu Leu
Ala Arg Arg Leu Arg Gly Lys His Lys Ala Glu Tyr Thr Pro His Val
Asp Thr Gly Asp Tyr Ile Ile Val Leu Asn Ala Asp Lys Val Ala Val
Thr Gly Asn Lys Arg Thr Asp Lys Met Tyr Tyr His His Thr Gly His
                                        75
                    70
Ile Gly Gly Ile Lys Glu Ala Thr Phe Glu Glu Met Ile Ala Arg Arg
                85
Pro Glu Arg Val Ile Glu Ile Ala Val Lys Gly Met Leu Pro Lys Gly
            100
                                105
                                                    110
Pro Leu Gly Arg Ala Met Phe Arg Lys Leu Lys Val Tyr Ala Gly Asn
                            120
                                                125
Glu His Asn His Ala Ala Gln Gln Pro Gln Val Leu Asp Ile
    130
                        135
<210> 10319
<211> 132
<212> PRT
<213> Enterobacter cloacae
<400> 10319
Ala Met Ala Glu Asn Gln Tyr Tyr Gly Thr Gly Arg Arg Lys Ser Ser
                                    10
Ala Ala Arg Val Phe Ile Lys Pro Gly Ser Gly Lys Ile Val Ile Asn
                                25
```

Gln Arg Ser Leu Glu Gln Tyr Phe Gly Arg Glu Thr Ala Arg Met Val

```
40
Val Arg Gln Pro Leu Glu Leu Val Asp Met Val Glu Lys Leu Asp Leu
                        55
Tyr Ile Thr Val Lys Gly Gly Gly Ile Ser Gly Gln Ala Gly Ala Ile
                    70
                                        75
Arg His Gly Ile Thr Arg Ala Leu Met Glu Tyr Asp Glu Ser Leu Arg
                                    90
                85
Ser Glu Leu Arg Lys Ala Gly Phe Val Thr Arg Asp Ala Arg Gln Val
                                105
Glu Arg Lys Lys Val Gly Leu Arg Lys Ala Arg Arg Arg Pro Gln Phe
        115
                            120
Ser Lys Arg
   130
<210> 10320
<211> 203
<212> PRT
<213> Enterobacter cloacae
<400> 10320
Thr Ser Val Arg Gln Leu Arg Pro Asp Ala Ala Leu Ala Ser Ile Lys
                                    10
Ser Thr Val Leu Val Ile Ala Val His Gln Ser Ile Gly Ala Gly Ile
            20
                                25
Ala Leu Ala Ile Pro Leu Thr Ala Ala Gly Gln Val Leu Thr Ile Ile
                            40
Val Arg Thr Ile Thr Val Ala Phe Gln His Ala Ala Asp Lys Ala Ala
                        55
Glu Asn Gly Asn Leu Thr Ala Leu Ser Trp Ile His Val Ser Ser Leu
                    70
                                         75
Phe Leu Gln Ala Met Arg Ile Ala Ile Pro Ala Val Ile Val Ala Ile
                                    90
Ser Val Gly Thr Ser Glu Val Gln Gly Met Leu Asn Ala Ile Pro Glu
                                105
Val Val Thr Ser Gly Leu Asn Ile Ala Gly Gly Met Ile Val Val Val
                            120
Gly Tyr Ala Met Val Ile Asn Met Met Arg Ala Gly Tyr Leu Met Pro
                        135
Phe Phe Tyr Leu Gly Phe Val Thr Ala Ala Phe Thr Asn Phe Asn Leu
                    150
Val Ala Leu Gly Val Ile Gly Ala Val Met Ala Ile Leu Tyr Ile Gln
                165
                                    170
Leu Ser Pro Lys Tyr Asn Arg Val Ala Gly Ala Pro Ala Gln Ala Ala
                                185
Gly Asn Asn Asp Leu Asp Asn Glu Leu Asp
<210> 10321
<211> 158
<212> PRT
<213> Enterobacter cloacae
<400> 10321
Gln Val Ser Glu Met Val Asp Met Thr Lys Thr Thr Glu Lys Lys
                                    10
Leu Thr Pro Gly Asp Ile Arg Gly Val Phe Ile Arg Ser Asn Leu Phe
                                25
Gln Gly Ser Trp Asn Phe Glu Arg Met Gln Ala Leu Gly Phe Cys Phe
                            40
                                                45
Ser Met Val Pro Ala Ile Lys Arg Leu Tyr Pro Glu Asn Asn Glu Ala
```

Arg Arg Gln Ala Ile Lys Arg His Leu Glu Phe Phe Asn Thr His Pro 70 75 Tyr Val Ala Ala Pro Val Leu Gly Val Thr Leu Ala Met Glu Glu His 85 90 Arg Ala Asn Gly Ala Glu Ile Asp Asp Gly Ala Ile Asn Gly Ile Lys 105 Val Gly Leu Met Gly Pro Leu Ala Gly Val Gly Asp Pro Ile Phe Trp 120 Gly Thr Val Arg Pro Val Phe Ala Ala Leu Gly Ala Gly Ile Ala Met 135 Ser Gly Ser Leu Leu Gly Pro Leu Leu Phe Phe Ile Leu 150 <210> 10322 <211> 138 <212> PRT <213> Enterobacter cloacae <400> 10322 Ser Val Gly Leu Arg Val Ser Ser Gly Cys Met Arg Met Asn Ala Pro 10 Asp Ile Lys Ala Leu Phe Glu Gln Val Arg Val Gly Thr Arg Val Gln 20 Ile Ile Asn Glu Pro Val Lys Phe Ser Val Glu Pro Asp Gly Lys Arg 40 Tyr Ile Glu Val His Arg Pro Leu Ala Gln Ala Glu Gly Glu Asn Pro 55 Gln Thr Val Pro Phe Thr His Ser Ala Ala Phe Thr Ala Phe Ala Ala Glu Ser Gly Ser Asp Lys Thr Leu Ile Asp Lys Ala Leu Ala Arg Arg 90 Ala Gly Ile Pro Val Ala Val Ser Thr Gly Asn Gly Ser Ser Ala Ser 105 Asn Ser Val Leu Ser Val Gln Asn Ser Arg Val Ser Ala Ala Val Ala 120 Glu Asp Glu Gly Glu Lys Ala Leu Gln <210> 10323 <211> 216 <212> PRT <213> Enterobacter cloacae <400> 10323 Leu Leu Ala Leu Thr Ala Ile Arg Tyr Thr Pro Leu Cys Tyr Phe Ile 10 Asn Thr Glu Gly Leu Ser Cys Met Tyr Gln Asp Leu Ile Arg Asn Glu 20 25 Leu Asn Glu Ala Ala Glu Thr Leu Ala Asn Phe Leu Lys Asp Asp Ala 40 45 Asn Ile His Ala Ile Gln Arg Ala Ala Val Leu Leu Ala Asp Ser Phe 55 60 Lys Ala Gly Gly Lys Val Leu Ser Cys Gly Asn Gly Gly Ser His Cys 70 75 Asp Ala Met His Phe Ala Glu Glu Leu Thr Gly Arg Tyr Arg Glu Asn 85 90 Arg Pro Gly Tyr Pro Ala Ile Ala Ile Ser Asp Val Ser His Ile Ser

100 105 110

Cys Val Gly Asn Asp Phe Gly Tyr Asp His Ile Phe Ser Arg Tyr Val
115 120 125

Glu Ala Val Gly Arg Glu Gly Asp Val Leu Leu Gly Ile Ser Thr Ser

```
135
                                            140
Gly Asn Ser Ala Asn Val Ile Lys Ala Ile Ala Ala Arg Glu Lys
                   150
                                       155
Gly Met Lys Val Ile Thr Leu Thr Gly Lys Asp Gly Lys Met Asp
                                   170
               165
Gly Thr Ala Asp Ile Glu Ile Arg Val Pro His Phe Gly Tyr Ala Asp
           180
                               185
Arg Val Gln Glu Ile His Ile Lys Val Ile His Ile Leu Ile Gln Leu
                            200
Ile Glu Lys Glu Met Val Lys
<210> 10324
<211> 290
<212> PRT
<213> Enterobacter cloacae
<400> 10324
Arg Arg Phe Ser Ala Ile Pro Leu Val Asp Tyr Phe Tyr Gly Leu Val
                                    10
Val Val Ile Trp Gly Thr Trp Ile Ala Ile Phe Leu Gln Gly
           20
                                25
Pro Val Ala Ala Pro Val Ser Ile Phe Trp Arg Phe Ala Val Ala Ser
       35
                            40
Ala Thr Met Met Ile Val Leu Val Ala Leu Arg Arg Leu Arg Arg Leu
                       55
Ala Leu Arg Asp His Leu Tyr Cys Met Leu Gln Gly Cys Cys Val Phe
                    70
Cys Phe Asn Phe Trp Cys Phe Tyr Thr Ala Ala Ala His Ile Asn Thr
               85
                                    90
Gly Leu Glu Ser Val Ile Phe Ser Met Ala Val Leu Tyr Asn Ala Ile
           100
                                105
Asn Ser Phe Ile Phe Phe Gly Gln Arg Pro Pro Ala Arg Phe Trp Thr
                            120
Ala Ala Leu Gly Leu Ile Gly Ile Ile Thr Leu Phe Trp Asn Asp
                        135
Leu Leu Ala Ser Gly Trp Ser Ala Ser Leu Leu Thr Gly Ile Gly Leu
                    150
Ser Ala Leu Gly Thr Tyr Gly Phe Ser Leu Gly Asn Met Ile Ser Met
                                    170
Arg His Gln Arg Asn Gly Met Glu Thr Met Thr Thr Asn Ala Trp Ala
                                185
Met Leu Tyr Gly Thr Val Val Met Gly Leu Ile Ala Leu Phe Arg Gly
       195
                            200
Asp Asn Phe Met Pro Glu Trp Thr Val Ser Tyr Met Gly Ala Met Leu
                       215
                                            220
Tyr Leu Ala Leu Phe Gly Ser Val Ile Ala Phe Gly Ala Tyr Phe Thr
                   230
                                        235
Leu Val Gly Arg Ile Gly Pro Gly Lys Ala Ala Tyr Ser Thr Leu Leu
               245
                                    250
Phe Pro Ala Gly Gly Ala Val Asp Phe Asn Gly Val Thr Arg Leu Pro
                               265
Phe Gly Ile Leu Thr Gly Phe Ser Gly Cys Phe Leu Ile Ile Gly Gly
                           280
His Phe
   290
<210> 10325
<211> 90
<212> PRT
<213> Enterobacter cloacae
```

<212> PRT

<400> 10325 Lys Lys Asn Thr Met Phe Gln Glu Val Thr Ile Thr Ala Pro Asn 10 Gly Leu His Thr Arg Pro Ala Ala Gln Phe Val Lys Glu Ala Lys Gly 20 25 Phe Thr Ser Glu Ile Thr Val Thr Ser Asn Gly Lys Ser Ala Ser Ala 40 Lys Ser Leu Phe Lys Leu Gln Thr Leu Gly Leu Thr Gln Gly Thr Val 55 Val Thr Ile Ser Ala Glu Gly Glu Asp Glu Gln Lys Ala Val Glu His 70 75 Leu Val Lys Leu Met Ala Glu Leu Glu <210> 10326 <211> 282 <212> PRT <213> Enterobacter cloacae <400> 10326 Gly Arg Val Met Ile Ser Gly Ile Leu Ala Ser Pro Gly Ile Ala Phe Gly Lys Ala Leu Leu Lys Glu Asp Glu Ile Val Ile Asp Arg Lys 20 25 Lys Ile Ser Ala Asp Lys Val Asp Gln Glu Val Glu Arg Phe Leu Ser 40 Gly Arg Ala Lys Ala Ser Ala Gln Leu Glu Ala Ile Lys Thr Lys Ala Gly Glu Thr Phe Gly Glu Glu Lys Glu Ala Ile Phe Glu Gly His Ile 70 75 Met Leu Leu Glu His Glu Glu Leu Glu Gln Glu Ile Ile Ala Leu Ile 90 Lys Asp Lys Gly Met Thr Ala Asp Ala Ala Ala His Glu Val Ile Glu 100 105 Gly Gln Ala Ser Ala Leu Glu Glu Leu Asp Asp Glu Tyr Leu Lys Glu 120 Arg Ala Ala Asp Val Arg Asp Ile Gly Lys Arg Leu Leu Arg Asn Ile 135 Leu Gly Leu Ala Ile Ile Asp Leu Ser Ala Ile Gln Asp Glu Val Ile 150 155 Leu Val Ala Ala Asp Leu Thr Pro Ser Glu Thr Ala Gln Leu Asn Leu 170 Asn Lys Val Leu Gly Phe Ile Thr Asp Ala Gly Gly Arg Thr Ser His 185 Thr Ser Ile Met Ala Arg Ser Leu Glu Leu Pro Ala Ile Val Gly Tyr 200 Gly Ser Val Thr Ser Gln Val Lys Asn Asn His Tyr Leu Ile Leu Asp 215 220 Ala Val Lys Asn Val Val Tyr Val Asn Pro Thr Asn Asp Val Ile Asp 230 235 His Cys Ala Pro Val Gln Glu Gln Val Gly Thr Glu Lys Asn Glu Leu 250 245 Ala Lys Thr Glu Lys Phe Ala Asn His Pro Ala Trp Asn Gly Phe Arg 265 Leu Lys Leu Cys Ala Asn Ile Arg Tyr Gly 280 <210> 10327 <211> 119

## <213> Enterobacter cloacae

<400> 10327 Asn His Asn Pro Thr Leu Leu Val Thr Asp Ile Glu Lys Asn Pro Val 10 Asn Leu Leu Glu Phe Ser His Gln Leu Asn Gln Met Leu Asn Cys Phe 20 25 Leu Leu Val Phe Thr Phe Ser Gly Asp Gly Asn Asn Gly Thr Leu Ser 40 . 45 Gln Ala Gln Ser Leu Gln Leu Glu Gln Ala Phe Cys Ala Ser Ala Phe 55 60 Ala Val Gly Ser His Ser Asp Phe Arg Ser Glu Ala Phe Arg Phe Phe 70 75 Asn Lys Leu Ser Ser Arg Ala Gly Val Gln Thr Val Arg Ser Gly Asn 90 Gly Asn Phe Leu Leu Glu His Cys Ile Phe Leu Leu Pro Ala Gly Leu Glu Asp Leu Cys Ser Arg Asp 115 <210> 10328 <211> 64 <212> PRT <213> Enterobacter cloacae <400> 10328 Leu Ser Ala Asp Ala Ala Ser Pro Val Val Lys Ile Pro Glu Ile Asn 10 Gln Ile Thr Ile Ala Lys Phe Phe Ser Gly Gln Gly Leu Ser Leu Met 20 25 Gly Ala Ala Leu Ile Tyr Glu Met Val Leu Lys Ala His Asp Ala Met Thr Asp Leu Ile Trp Asn Glu Tyr Glu Val Lys Thr Met Asn Gly 50 55 <210> 10329 <211> 77 <212> PRT <213> Enterobacter cloacae <400> 10329 Asp Glu His Met Arg Ala Ser Ala Thr Arg Ser Glu Asp Leu Gly His 10 Pro Glu Asn Lys Ser Glu Leu Ala Trp Asn Glu Asn Lys Lys Trp Lys 20 Lys Asn Gln Glu Ser Leu Leu Asn Gly Val Glu Ile Pro Ile Val Ser Leu Asp Tyr Glu Ile Glu Ile Asn Gln Glu Ile Gly Asn Tyr Asn Ala Phe Lys Asp Thr Cys Tyr Leu Glu Asn Tyr Arg 70 <210> 10330 <211> 142 <212> PRT <213> Enterobacter cloacae <400> 10330

Gly Gly Thr Leu Thr Gly Leu Leu Phe Glu Gln Ile Glu Glu Arg Lys

Met Ser Tyr Leu Glu Tyr Ile Asn Glu Val Lys Val Ser Gly Ile Val

```
20
                                25
Ile Ser Ala Val Glu Lys Lys Met Thr Asp Gln Ser Ile Gly Leu Leu
                            40
Ile Lys Leu Lys Asn Arg Met Lys Thr Glu Val Asp Gly Glu Ile Thr
                        55
                                            60
Glu Arg Glu Phe Ser Val Gln Ile Lys Val Ser Pro Glu Met Tyr Ser
                    70
                                        7.5
Thr Cys Phe Thr Gly Ile Asn Gln Gly Asp Glu Leu Met Val Ser Gly
                                    90
Tyr Ile Val Val Asp Thr Ile Met Ile Glu Gly Arg Glu His Pro Leu
            100
                                105
Asp Tyr Met Arg Val Val Ala Thr Ser Lys Leu Ala His Ile Pro Lys
                            120
Pro Leu Lys Gly Phe Gly Gln Ser Ser Phe Asn Gln Ile
                        135
<210> 10331
<211> 66
<212> PRT
<213> Enterobacter cloacae
<400> 10331
Ile Asn Tyr Leu Arg Tyr Phe Ile Phe Ile Tyr Ile Glu Tyr Arg Lys
Lys Thr Lys Leu Ile Thr Thr Tyr Cys Ser Ser Pro Lys Phe Leu Phe
            20
                                25
His Gly Asp Ser Lys Arg Arg Asn Pro Met Lys Gly Phe Leu Pro Phe
                            40
Arg Val Gly Leu Met Ser Asp Leu Ile Lys Ala Thr Leu Ser Lys Thr
                        55
Phe
65
<210> 10332
<211> 123
<212> PRT
<213> Enterobacter cloacae
<400> 10332
Ser Ser Ala Ala Leu Glu Glu Gln Ile Met Leu Asp Asp Cys Asn Asp
                                    10
Asp Met Gly Trp Asp Ile Phe Phe Asp Gln Asp Tyr Leu Met Ser Glu
                                25
Lys Lys Leu Ala Val Lys Trp Thr Asp Arg Glu Ile Met Asp Val Tyr
                            40
Ile Lys Ala Phe Lys Ser Thr Leu Glu Leu Phe Asp Glu Leu Val Ser
                        55
Cys Asp Leu Leu Thr Lys Arg Asn Ala Phe Gly Lys Leu Glu Ile Asn
                    70
                                        7.5
Pro Ile Phe Glu Asn His Phe Glu Trp Ile Met Ser Glu Ala Phe Glu
                85
                                    90
Ile Val Gly Asn His Leu Gly Tyr Asn Val Pro Gln Ile Arg Lys Leu
            100
                               105
Met Ala Thr Ile Cys Gln Met Asn Leu Lys
<210> 10333
<211> 86
<212> PRT
```

<213> Enterobacter cloacae

```
<400> 10333
Arg Phe Leu Ser Met Val Ala Glu Thr Gly Trp Ile Asn Ala Ala Arg
                                     10
Cys Leu Thr Trp Arg Asn Gln Phe Trp Cys Glu Val Asn Val Gly Ile
            20
                                 25
Glu Thr Ile Ile Gly Leu Ala Ala Leu Val Ile Ser Ala Ile Ala Gly
                             40
Ala Phe Gly Leu Gly His Ile Arg Gly Thr Ser Lys Ala Gln Ala Lys
                        55
Ala Asp Gln Gln Arg Thr Glu Asp Asn Ala Ala Ala Thr Val Ala Ala
                    70
Ala Glu Arg Arg Val
<210> 10334
<211> 137
<212> PRT
<213> Enterobacter cloacae
<400> 10334
Val Asn Ser Lys Gly Lys Ala Phe Asp Val Lys Leu Glu Ala Tyr Ala
Leu Ser Glu Asn Asp Gly Lys Asn Gly Ile Arg Gly Thr Leu Ile Ser
Arg Asn Gly His Ala Ile Ala Gly Ala Ala Phe Ala Gly Gly Leu Ser
Ser Leu Ala Gly Ser Leu Ser Pro Ser Lys Val Ser Ser Phe Tyr Ile
Asp Pro Tyr Ser Gln Ala Gln Tyr Gln Ser Pro Asn Phe Gly Ala Leu
                    70
Gly Ala Leu Ala Gly Val Gly Ala Ala Gln Gly Gly Leu Asn Arg Leu
                85
                                     90
Val Asp Tyr Tyr Thr Ala Ile Ala Glu Gln Gln Trp Pro Ile Val Glu
            100
                                 105
Ile Ser Pro Gly Arg Ala Ile Thr Phe Val Val Gln Thr Gly Thr Thr
                             120
Ile Pro Thr Asn Leu Thr Ser Arg
    130
                        135
<210> 10335
<211> 161
<212> PRT
<213> Enterobacter cloacae
<400> 10335
Met Asp Ser Leu Glu Lys Lys Glu Ser Pro Glu Ser Ala Gly Pro Glu
                                     10
. Ile Thr Lys Lys Met Val Arg Glu Arg Thr Thr Lys Lys Ile Thr Phe
Glu Ile Asp Ile Glu Lys Ile Leu Lys Tyr Leu Phe Phe Phe Ala Phe
Ala Val Leu Val Ile Ile Tyr Gly Tyr Lys Gly Phe Met Asn Val Tyr
                        55
Asp Tyr Phe Asn Lys Gln Ser Gln Pro Ser Tyr Lys Ile Ala Val Leu
                    70
                                         75
Asp Met Pro Glu Leu Arg Lys Glu Phe Phe Lys His His Gly Gly Arg
                85
                                     90
Thr Ala Asp Asn Asp Arg Ser Gln Phe Glu Glu Tyr Phe Arg Thr Leu
            100
                                105
```

Met Lys Ile Tyr Arg Asp Arg Gly Tyr Leu Ile Ile Asp Ala Thr Leu 115 120 125

<400> 10337

<210> 10336 <211> 308 <212> PRT <213> Enterobacter cloacae <400> 10336 Thr Phe Thr Asn Phe Phe Arg Lys Asp Phe Leu Phe Trp Gln Ile Leu 10 His Gly His Tyr Ser Ala Leu Cys Asn Leu Ile Gln Ser Val Thr Lys 20 25 Pro Glu Glu Glu Ile Val Ile Phe Ser Thr Gly Asn Leu Phe Asp Tyr 35 40 45 Gly Pro Glu Pro Ile Glu Leu Met Lys Ala Ile Asn Ser Gly Phe Phe 55 Asp Gly Arg Phe Val Arg His Phe Ser Ala Ala Gly Ala Gly Glu Glu 70 75 Met Leu Lys Lys Leu Leu Pro Leu Asn Lys Asp Arg Arg Thr Phe Tyr 8.5 90 Pro Ser Thr Tyr Leu Asn Glu Arg Trp Cys Val Met Gly Gly Lys Trp 105 110 100 His Lys Ala Val Asn Arg Tyr Tyr Leu Glu Glu Glu Val Lys Lys Leu 120 125 Leu Asn Thr Gln Leu Gly Thr Met Met Gln Ile Leu Leu Lys Gly Asp 140 135 Ile Lys Ile Gly Val Cys Pro Ser Asp Tyr Ala Pro Ile Arg Thr Ser 150 155 160 Phe Thr Asp Thr Tyr Asn Ala Leu Gln Ala Phe Asn Tyr Ala Asn Val 165 170 Asn Ile Phe Gln Ser Gln Phe Leu Phe Gly Met Asp His Ala Val Ile 180 185 190 Pro Met Met Ile Asn Asp Val Asn Leu Met Val Leu Gly Arg Asn Pro 200 205 Val Asn Ser Ile Arg Lys Ala His Gly Arg Thr Gln Asn Asn Leu Pro 215 220 Val Leu Ile Gly Asn Cys Leu His Ile Asn Thr Gly Ser Leu Tyr Met 230 235 Ser Lys Leu Glu Asp Gln Val Ile Val Ala Pro Gly Ile Pro Gln Thr 245 250 Asp Ser Pro Ala Leu Thr Leu Val Glu Ile Ile Met Lys Asn Asn Pro 265 Val Leu Leu Cys His Gln Leu Ile Gln Thr Thr Asn Lys Phe Tyr Ser 280 285 Leu Lys Thr Tyr Pro Leu Glu Leu Asp Ser Ile Glu Asn Asn Ile Glu 290 295 Val Thr Arg 305 <210> 10337 <211> 116 <212> PRT <213> Enterobacter cloacae

Thr Arg Val Arg Asn Pro Leu Met Asp Ile Arg Lys Ile Lys Lys Leu

```
10
Ile Glu Leu Val Glu Glu Ser Gly Ile Ser Glu Leu Glu Ile Ser Glu
           20
                                25
Gly Glu Glu Ser Val Arg Ile Ser Arg Ala Ala Pro Ala Ala Ser Phe
                            40
                                                45
Pro Val Met Gln Gln Ala Tyr Ala Ala Pro Val Gln Gln Pro Ala Leu
                        55
                                            60
Ser Ala Ala Val Ala Pro Ala Ala Ala Glu Ala Ala Pro Ala Ala Ala
                    70
                                        75
Thr Glu Asn His Gly His Ile Val Ser Ser Pro Trp Leu Val Leu Ser
               85
                                    90
Thr Ala Pro Arg Ser Arg Thr Arg Lys Ala Ser Thr Lys Cys Val Lys
                                105
Lys Ser Thr
       115
<210> 10338
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10338
Gly Gly Gly Lys Gly Glu Gly Glu Val Gly Gly Thr Arg Glu Glu Arg
                                    10
Arg Lys Arg Gly Leu Gly Lys Gly Arg Ala Met Glu Gly Gly Glu Gly
           20
Gly Arg Glu Gly Lys. Val Glu Gly Gly Ala Glu Val Gly Gly Val
                            40
Gly Gly Glu Gly Gly Gly Gly Gly Glu Arg
   50
                        55
<210> 10339
<211> 80
<212> PRT
<213> Enterobacter cloacae
<400> 10339
Lys Arg Arg Lys Arg Lys Lys Lys Asp Leu Ser Ala Lys Gly Gln
                                    10
                                                        15
Ala Glu Ala Ser Lys Arg Thr Ala Lys Ala Thr Thr Asn Pro Leu Thr
                                25
Lys Glu Asn Ser Gly Asn Lys Glu Thr Phe Thr Lys Ala Pro Glu Arg
Glu Glu Ala Leu Gly Gln Lys Thr Val Glu Ile Gln Leu Gln Gly
                        55
Leu Glu Glu Lys Glu Lys Ala Ser Ala Phe Trp Pro Thr Lys Glu
                    70
                                        75
                                                            80
<210> 10340
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 10340
Thr Ala Leu Ala Ser Ser Pro Asp Leu Arg Ile Met Arg Gly Leu Val
                                    10
Val Ile Asp Gly Gly Phe Asn Leu Asn Gln Ser Ser Leu Cys Tyr
                                25
                                                    30
Ser Thr Met Leu Pro Ile Gly Glu Leu Arg Lys Asn Gly Tyr Thr Leu
                            40
Pro Ser Ile Val Met Gly Leu Arg Ser Asn His Phe Arg Leu
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60

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<210> 10341 <211> 71
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<212> PRT

<213> Enterobacter cloacae

<400> 10341

 Ile Leu Thr Arg Val Thr Glu Ser Val Arg Thr Gly Ser Gly Leu Val

 1
 5
 10
 15

 Leu Ser Thr Leu Ile Lys Ala Phe Phe Ile Ala Leu Phe Pro Leu Val
 20
 25
 30

 Leu Lys Lys Leu Pro Thr Arg Pro Asp Gly Gly Val Gly Gln Lys Ile
 40
 45

 Met Pro Val Pro Tyr Ser Ser Ser Gln His Ala Tyr Ala Gly Thr Leu

Met Pro Val Pro Tyr Ser Ser Ser Gln His Ala Tyr Ala Gly Thr Leu 50 55 60

Ser Gly Gln His Glu His 65 70

<210> 10342

<211> 113

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<212> PRT

<213> Enterobacter cloacae

<400> 10342

 Pro
 Thr
 Pro
 Pro
 Ser
 Gly
 Arg
 Val
 Gly
 Asn
 Phe
 Phe
 Arg
 Thr
 Arg
 Gly

 Asn
 Arg
 Ala
 Met
 Lys
 Lys
 Ala
 Phe
 Ile
 Asn
 Val
 Asp
 Lys
 Thr
 Asn
 Pro

 Leu
 Pro
 Val
 Leu
 Thr
 Asp
 Ser
 Val
 Thr
 Arg
 Val
 Ser
 Ile
 Glu
 Val
 Asn
 Ile
 Gln
 Cys
 Thr

 Ala
 Lys
 Asp
 Glu
 Asn
 Glu
 Asp
 Leu
 Asp
 Leu

 50
 55
 60
 60
 1
 Leu
 Asp
 Ser
 Ser

 65
 70
 75
 80

 Pro
 Val
 Gln
 Ala
 Leu
 Arg
 Val
 Met
 Thr
 Ala
 Leu
 Glu

<210> 10343

<211> 115

<212> PRT

<213> Enterobacter cloacae

<400> 10343

Asn Gly Glu Lys Pro Lys Arg Arg Thr Leu Val Tyr Ala Thr Gly Asn Arg Asn Arg Phe Arg Leu Gln Arg Asn Arg Val His Lys Gln Asn Pro 20 25 Ala Gly Lys Ala Pro Ser Met Ser Ser Val Leu Asn Lys Lys Thr Val 35 40 45 Thr Val Ile Ala Asp Thr Ala Ile Pro Ile Phe Glu Arg Ile Ala Glu 55 60 Glu Ala Lys Leu Lys Glu Gly Glu Ser Val Ser Thr Asp Thr Tyr Thr 70 75 Leu Val Leu Thr Asn Asp Glu Met Asn Asp Ile Ile Asn Ala His Ala Asp Leu Lys Glu. Tyr Leu Arg Lys His Ala Glu Lys Met Asn Lys Gly

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The fight of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of the transfer of t
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100
                                105
                                                    110
Gln Ala
       115
<210> 10344
<211> 113
<212> PRT
<213> Enterobacter cloacae
<400> 10344
Thr Tyr Gly Glu Asp Met Val Ile Thr Tyr Ser Leu Ser Glu Thr Phe
Asn Met Phe Leu Arg Glu Ile Ile Ala Ser Gly Leu Ala Val Phe Cys
                                25
Ala Trp Cys Val Leu Cys Leu Phe Ser Asp Gln Glu Arg Gly Lys Glu
        35
Val Pro Val Ser Met Lys Lys Ile Thr Ser Lys Ser Ala Phe Ser Tyr
                        55
Phe Ile Ser Ser Gln Ile Ala Ala Phe Ile Ile Ser Leu Leu Gly Ser
                                        75
Ile Leu Ser Thr Lys Trp Asp Asn Ile Val Trp Asn Asp Glu Ile Arg
                85
                                    90
Gln Ser Asp Leu His Val Phe Thr Thr Thr Ser Gln Ile Arg Ser Asn
            100
                                105
                                                     110
Ala
<210> 10345
<211> 64
<212> PRT
<213> Enterobacter cloacae
<400> 10345
Ser Pro Asn Val Cys Leu Ser Ile Arg Leu Val Lys Tyr Gly Ser Ser
                                    10
Leu Ile Lys Ile Cys Ser Leu Ile Val Phe Phe Ala Gly Ser Pro Arg
Leu Phe Phe Val Ser Ser Pro Glu Ser Ser Lys Tyr Phe Ser Ile Phe
Leu Glu Asn Arg Glu Gln Asp Gly Val Leu Leu Phe Glu Gln Ser
<210> 10346
<211> 164
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(10)
<400> 10346
Met His Ser Leu Met Thr Val Ala Ile Xaa Ile Gln Asn Gln Gly
                                    10
Phe Phe Asp Leu Phe Lys Ser Gln Glu Arg Lys Ser Lys Glu Val Ile
            20
                                25
Ser Ile Leu Phe Glu Tyr Val Arg Glu Asn Ser Val Trp Val Glu His
                            40
                                                45
Tyr Glu Ser Gln Ile Ser Ile Thr Gln Asp Asp Arg Tyr Ser Leu Val
                        55
His Phe Asn Gln Tyr Gln Glu Pro Asn Trp Ser Phe Ile Ser Lys Glu
```

65 Leu Glu Glu Thr Tyr Pro Glu Phe Asp Phe His Val Ser Arg Lys 90 Ser Leu Glu Asn Trp Ser Asn Ala Arg Leu Ser Thr Gln Thr Ile Lys 100 Lys Leu Leu Lys Glu Lys Asn Trp Thr Met Lys Glu Val Ala Ala Arg 120 Trp Asn Arg Ser Glu Ser Trp Met Ser Lys Val Val Asn Asp Glu Glu 130 Arg Glu Leu Tyr Trp Glu Asp Ala Phe Lys Gly Leu Pro Ser Lys Ile 145 Glu Lys

<210> 10347 <211> 98 <212> PRT

<213> Enterobacter cloacae

<400> 10347 Gly Ser Ile Met Ser Lys Glu Leu Val Arg Pro Ile Met Glu Lys Pro 10 Glu Arg Ala Arg Lys Glu Ser Ser Leu Thr Asn Ile Ala Ala Lys Lys 20 25 Lys Asn Thr Thr Gly Glu Thr Pro Lys Thr Ile Arg Met Thr Pro Ala 40 Glu Lys Met Leu Ala Gln Glu Leu Val Glu Gln Ile Gln Ala Leu Thr 50 55 His Lys Asn Ile Thr Val Ser Thr Leu Leu Arg Ala Gly Leu Tyr Leu 70 75 Ala Gln Ser Ala Gly Pro Glu Lys Val Leu Lys Ala Ile Lys Glu Asn 85 Ile

<210> 10348 <211> 97 <212> PRT <213> Enterobacter cloacae

<210> 10349 <211> 63

<212> PRT

<213> Enterobacter cloacae

```
<220>
<221>UNSURE
<222>(27)
<400> 10349
Ser Thr Asn Asn Trp Glu Lys Glu Tyr Leu Pro Pro Lys Gly Leu
                                    10
Glu Phe Met Glu Ile Pro Thr Asp Pro Phe Xaa Cys Val Leu Leu Gly
                                25
Trp Gly Gly Ile Lys Gly Gly Pro Phe Pro Gly Gly Glu Ser Arg
Thr Asn Tyr Pro Ala Gln Gly Gly Pro Thr Phe Pro Trp Val Val
<210> 10350
<211> 65
<212> PRT
<213> Enterobacter cloacae
<400> 10350
Ile Gln Lys Val Thr Phe Ile Met Pro Ser Leu Leu Gly Ile Ser Asn
                                    10
Lys Lys Ser Leu Pro Asn Leu Leu Asp Ile Ser Asn Leu His Leu Ile
                                25
           20
Asp Asn His Met His Ser Asp Tyr Ser Val Asp Val Pro Phe Gly Gly
                            40
Pro Ala Leu Arg Glu Gln Lys Lys Arg Pro Ile Gly Arg Phe Ala Leu
                        55
65
<210> 10351
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 10351
Lys Ser Gly Tyr Pro Pro Phe Pro Gln Ala Gly Asp Asp Tyr Met Gln
1
                                    10
Asp Asn Glu Leu Ala Lys Val Arg Asp Phe Trp Leu Thr Val Lys Leu
            20
                                25
Met Ala Glu Asn Ser Leu Lys Glu Ile Ser Leu Leu Asn Thr His Gln
Glu Ile Leu Gln Lys Ser His Arg Glu Ala Met Ser Asn Leu Ser Ser
Leu Leu Lys Glu Gln Val
<210> 10352
<211> 144
<212> PRT
<213> Enterobacter cloacae
<400> 10352
Lys Gly Ala Gly Pro Gly Met Ser Arg Ile Ile Ala Arg Thr Gly Met
                                    10
Ile Arg Ser Ser Ile Leu Thr His Arg Phe Ile Arg Ala Ala Arg
                                25
Ser Arg Ala Ser Val Arg Pro Arg Ala Gln Gly Gln Trp His Arg
                            40
Arg Arg Ser Ile Arg Pro Val Leu Met Ser Cys Lys Ser Ser Val
```

```
55
                                             60
'Ala Gln Ala Asp Trp Thr Gly Ala Arg Gly Leu Met Glu Ala Gly Lys
                    70
                                         75
Arg Gln Leu Glu Asn Ala Leu Arg Ala Arg Asp Val Tyr Lys Asn Glu
                85
                                    90
Tyr Thr Leu Ser Lys Arg Ser Ile Asn Asp Leu Leu Ser Val Glu Gln
                                105
Asp Val Trp Ser Ala Thr Ser Ala Lys Ile Met Ala Glu Tyr Asp Gly
                            120
                                                 125
Trp Ser Ala Ala Ile Asn Tyr Ala Ser Ala Val Asp Asn Leu Met Pro
                        135
<210> 10353
<211> 65
<212> PRT
<213> Enterobacter cloacae
<400> 10353
Leu Thr Glu Gly Ser Arg Ser Arg Ala Lys Arg Ile Leu Ser Phe Ile
                                    10
Val Ile Ala Ala Thr Gly Asp Ile Pro Ala Trp Pro Leu Phe Ala Leu
            20
                                25
Ala Ala Val Thr Thr Asn Glu Ile Lys Val Arg Glu Ala Asp Asn Leu
                                         1
                            40
                                                 4.5
Ser Asn Leu Leu His Phe Ile Phe Ile Ser Pro Asp Ser Arg
                        55
                                             60
65
<210> 10354
<211> 99
<212> PRT
<213> Enterobacter cloacae
<400> 10354
Ile Ser Phe Ala Val Arg His Leu Arg Asn Asp Ile Gly Phe Thr Cys
Ser Gly Pro Val Phe Thr Asn Arg Trp Met Ile His Phe Ser Phe Ile
                                25
Tyr Leu Ala Arg Ser Arg Tyr Phe Met Phe Val Ile Arg Phe Gln Asn
Val Thr Phe Val Ile Val Lys Ser Ile Leu Leu Ile Asn Ile Ala Leu
                        55
Ser Tyr Lys Phe Ile Asn Lys Ser Trp Ile Val His Tyr Tyr Cys Leu
Asn Gly Lys Ser Val Thr Ala Ile Phe Asp Thr Asn Gly Cys Val Arg
                                     90
Asn Asp
<210> 10355
<211> 131
<212> PRT
<213> Enterobacter cloacae
<400> 10355
Ala Phe Asn Asn Arg Ser Glu Tyr Ile Pro Lys Arg Ser Val Leu Ile
Val Pro Asp Ala Pro Ile Ser Ile Glu Asp Gly Ser Asn Ala Phe Pro
Val Gln Thr Val Ile Met Asn Asp Pro Thr Leu Ile Asp Lys Phe Val
```

```
40
Gly Glu Gly Asn Ile Asn Glu Glu Asn Ala Phe Asp Tyr His Lys Ser
                        55
                                            60
Asn Val Leu Glu Pro Asn Tyr Lys His Glu Ile Ser Arg Thr Ser Gln
                    70
                                        75
Ile Asp Lys Ala Glu Met Asn His Pro Ser Val Arg Glu Asn Trp Ala
                85
                                    90
Arg Ala Gly Glu Pro Tyr Ile Val Pro Gln Met Ser Asp Ser Glu Arg
                                105
Asn Leu Lys Ile Lys Arg Phe Gln Lys Pro Thr Ser Gly Ala Asn His
                            120
Gly His
   130
<210> 10356
<211> 232
<212> PRT
<213> Enterobacter cloacae
<400> 10356
Lys Leu Asn Asp Ser Arg Asn Leu Gln Val Glu Leu Ile Met Asp Ile
                                    10
Lys Lys Ala Trp Glu Asn Lys Thr Val Arg Leu Ser Val Ile Gly Ala
            20
                                25
Leu Leu Val Val Ile Val Tyr Ile Ile Ser Gln Ser Ile Phe Ser Thr
        35
                            40
Pro Val Lys Lys Glu Lys Lys Thr Gln Lys Lys Asp Met Gln Thr Asn
                        55
Leu Leu Asp Asp Ser Gln Met Asn Lys Leu Ser Asn Glu Glu Ser
                    70
                                        75
Gln Lys Val Tyr Lys Glu Met Val Lys Gln Asn Arg Leu Asp Gln Asn
                85
                                    90
Ala Ala Lys Glu Asp Arg Glu Lys Ala Glu Lys Ala Gln Gln Glu Thr
            100
                                105
                                                     110
Lys Ala Gln Val Ala Ser Leu Thr Ser Gln Leu Gln Gln Leu Ser Gln
                            120
Gln Ile Asn Asp Met Gln Thr Asn Arg Asn Gly Asn Arg Asn Leu Asp
                        135
                                            140
Ala Gly Ser Ser Arg Lys Thr Ile Asn Glu Gln Ala Pro Ala Ala Pro
                    150
                                        155
Tyr Gln Leu Asn Ala Asn Ala Pro Ile Asn Gly Val Asn Pro Asn Tyr
                165
                                    170
Ala Ser Ile Thr Pro Thr Arg Asn Ser Pro Met Arg Thr Ile Thr Gln
                                185
Ser Ser Ile Lys Thr Asn Gly Thr Asp Gly Val Ile Gln Val Met Pro
                            200
Val Ser Glu Asn Arg Ile Lys Glu Gly Arg Glu Val Ile Ala Gly Leu
                        215
His Gln Gly Pro Glu Asp Thr His
                    230
<210> 10357
<211> .75
<212> PRT
<213> Enterobacter cloacae
<400> 10357
Cys Pro Lys Ala Leu Lys Gly Ile Glu Asn Pro Phe Arg Arg Ala Phe
                                   10
Glu Leu Gln Arg Arg Ser Ser Leu Lys Cys Pro Ser Cys Pro Thr Ile
```

<220>

```
Cys Gln Gln Asn Val Lys Thr Ser Ile Gln Val Ala Gly Ile Tyr Val
                             40
Glu Cys Glu Lys Pro Gln Thr Lys Ile Lys Lys Thr Leu Thr Val Ser
                         55
                                             60
Phe Gln Gln Arg Asn Leu Cys Tyr Ser Pro
                    70
<210> 10358
<211> 85
<212> PRT
<213> Enterobacter cloacae
<400> 10358
His Phe Phe Ala Arg Asn Trp Glu Lys Cys Gln Pro Asn Leu Thr Asp
                                     10
Pro Asp Ala Tyr Glu Arg Gln Leu Gln Gln Lys Gly Lys Gly Leu Ala
            20
                                 25
Leu Arg Phe Val Glu Pro Trp Leu Leu Ala Phe Val Asn Pro Asp Ala
                             40
                                                 45
Lys Gln Gly Arg Cys Gln Pro Val Met Val Cys Tyr Ala Leu Leu Gly
                                             60
                         55
Lys Thr Arg Gly Lys Val Ser Thr Ala Thr Ala Ser Glu Asn Phe Arg
                    70
65
Tyr Thr Asn Ser
<210> 10359
<211> 76
<212> PRT
<213> Enterobacter cloacae
<400> 10359
Arg Gly Gly Val Lys His Thr Pro Phe Ala Thr Ile Leu Lys Pro Leu
                                     10
Ser Asp Arg Cys Ser Ser Leu Pro Gly Ser Trp Arg Ser Asp Leu Val
            20
                                 25
Val Lys Thr Tyr His Pro Pro Ala Gln Pro Val Gly Ile Phe Gly Cys
                             40
Asn Arg Phe Lys Leu Gln Phe Leu Pro Ser Val Met Gly Met Ile Arg
                         55
Gly Gln Asn Leu Asp Asn Tyr Ser Asn Asn Pro
                    70
<210> 10360
<211> 90
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(50)
<220>
<221>UNSURE
<222>(66)
<220>
<221>UNSURE
<222>(72)
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<221>UNSURE
<222>(73)
<220>
<221>UNSURE
<222>(88)
<220>
<221>UNSURE
<222>(89)
<400> 10360
Arg Asn Gln Leu Pro Ala Thr Ala Thr Leu Pro Phe Cys Ser Ser Ile
                                    10
Pro Gly Gly Glu Val Leu Phe Ser Ser Ala Gln Gly Ala Ala Leu Arg
                                25
Pro Ala Val Asn Ser Ala Asp Phe Ser Glu His Ser Arg Ala Arg Asp
                            40
Val Xaa Leu Trp Thr Val Glu Gly Ser Ala Gly Thr Ile Asp Thr Gly
Val Xaa Asn Glu Tyr Gly Thr Xaa Xaa Ile Ile Ala Leu Phe Trp Val
                    70
                                        75
Arg Pro Ile Phe Leu Gly Lys Xaa Xaa
                85
<210> 10361
<211> 80
<212> PRT
<213> Enterobacter cloacae
<400> 10361
Gly Gly Gly Val Tyr His Lys Leu Trp Gln Lys Met Gln Trp Leu Phe
                                    10
Phe Ile Leu Val Ala Pro Arg Leu Leu Val Asp Ala Asp Tyr Glu Gly
            20
                                25
Thr Leu Ser Asn Met Leu Ala Ala Ile Lys Cys Leu Ser Pro Val Arg
His Ser Leu Ile Val Val Thr Lys Asn Arq Ala Leu Phe Phe Val Trp
Val Asn Asn Cys Phe Ser Asn Phe Leu Asn Ile Asp Ala Arg Lys
                    70
<210> 10362
<211> 82
<212> PRT
<213> Enterobacter cloacae
<400> 10362
Ala Ser Ala Ala Thr Ser Gly Ser Leu Leu Pro Val Pro Val Pro Gly
Tyr Ser Arg Gln Trp Gln Ile Gln Val Cys Ser Phe Ile Phe Leu Ile
            20
                                25
Ile Lys Gln Arg Met Ser Ala Thr Met Lys Val Lys Ala Ala Glu Tyr
                            40
Thr Thr Ser Tyr Gly Lys Lys Cys Ser Gly Cys Phe Leu Tyr Leu Ser
                        55
Arg Arg Asp Tyr Trp Ser Thr Arg Ile Met Lys Val Leu Cys Pro Ile
                                        75
65
                    70
Cys
```

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<210> 10363
<211> 106
<212> PRT
<213> Enterobacter cloacae
<400> 10363
Gln Ser Glu Ile Glu Gly Met His Arg Thr Lys Phe Glu Arg Leu Lys
                                     10
Asp Asp Leu Ile Gly Glu Ala Val Leu Ser Ile Leu Lys Glu Asn Gly
                                 25
Pro Ile Thr Phe Val Ser Leu Ala Asn Arg Leu Arg Ala Met Ala Asn
                             40
Val Glu Ser Asn Asp Glu Arg Lys Asn Ala Leu Ile Ala Ala Glu Asp
                         55
Glu Val Arg Gln Arg Val Thr Gly Val Ser His Asp Arg Gly Arg Val
                     70
Met Gly Asn Tyr Asp Met Gly Arg Met Arg Ser Leu Phe Thr His Asn
                 85
Thr Leu Leu Thr Pro Asp Lys Lys His
             100
<210> 10364
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10364
Arg Asp Lys Phe Phe Lys Phe Phe Phe Ala Ile Asp Ala Phe Arg Asn
                                     10
Ala Phe Pro Ser Arg His Val Ala Val Tyr Leu Tyr Arg Phe Asn Asn
             20
                                 25
Ala Ile Val Ile Val Val Ser Asn Lys Val Leu Asn Tyr Ile Ala Val
                             40
Lys Leu Gln Ser Ile Asn Ile Asn Leu Ser Asp Gly
    50
                         55
<210> 10365
<211> 82
<212> PRT
<213> Enterobacter cloacae
<400> 10365
Ile Thr Gly Ser Ser Thr Tyr Asn Glu Met Asn Leu Ala His Leu Lys
Lys Gln Ile His Tyr Asn Arg Val Met Tyr Ile Ala Val Leu His Leu
             20
Arg His Leu Pro His Arg Leu Ile Ile Phe Ile Tyr Asp His Lys Asp
Ile Phe Tyr Val Pro Gln Lys Val Ile Thr His Glu Tyr Ile Asn His
                         55
Asp His Cys Val Tyr Ser Phe Ile Leu Trp Gly Ser Phe Cys Ser Val
65
                     70
Gln
<210> 10366
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 10366
```

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Thr Ser Leu Phe Ile Phe Val Arg Leu Ser Phe Asp Ser Cys Gln Thr
                                    10
Leu Ile Trp Lys Thr Lys Lys Ser Phe Leu Leu Ile Arg Phe Thr Glu
                                25
            20
Ile Leu Leu Arg Tyr Phe Gly Tyr Tyr Leu Asn Asn Tyr Gln Lys Arg
                            40
Gly Ala Ala Met Arg Lys Ser Tyr Thr Phe Gly Ile Pro Phe Gly Leu
                        55
Gln Arg Glu Ser Gly Leu Phe Leu Asp Ile Thr Glu Val Ser Arg Gly
                    70
                                        75
Ile Asp Cys Asn Cys Ile Cys Pro Ala Cys Lys Thr Asp Leu Leu Ala
                85
                                    90
Lys Gln Gly Glu Val Lys Leu Trp His Phe Ser His Ser Thr Ala Val
                                105
Ala Gly Asp Cys Asp Gly Leu Met Glu Ala Ile Arg Gly Lys Ile Ile
                            120
Glu Val Ile Asn Glu His Gln Val Leu Gly Phe Pro Asn Leu Leu Ala
                        135
                                            140
Gly Asp Asp Gly Gly Pro Val Ser Leu Asn Glu Val Ser Gly Ser Gly
                    150
                                        155
Ser Met Phe Gly Gly Thr Ala Asp Leu Phe Val Ser Val Lys Pro Leu
                                    170
                165
Pro Pro Val Ala Ile Thr Asn Asp
            180
                                185
<210> 10367
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10367
Cys Pro Thr His Gln Ile Ala Ala Thr Tyr Glu Thr Val Pro Arg Gln
                                    10
Ile Met Ala Gln Ser Gln Ile Tyr Gln Cys Ser Arg Lys Met Lys Leu
            20
Gly Tyr Phe Pro Arg Phe Ser Ile Tyr Trp Gly Thr Ser Gln Asp Tyr
Glu Ser Cys Phe Thr Val Cys Val Val Arg Ser Leu
                        55
<210> 10368
<211> 82
<212> PRT
<213> Enterobacter cloacae
<400> 10368
Asn Tyr Phe Ser Asp Leu Arg Gly Leu Tyr Tyr Leu Pro Ser Ala Lys
Val Ser His Asn Phe Thr Ile Ser Thr Tyr Gln Asn Phe Leu Gly Leu
Leu Phe Cys Tyr Val Lys Cys His Ile Leu Lys Asn Met Ala Tyr Met
                            40
Leu Ile His Asn Ala Ile Lys Asp Val Leu Ala Leu Ser Leu Ser Ser
                        55
                                            60
Asn Glu Ser Cys Thr Pro Gln Gln Pro Gln Met Met Thr Asp Gln Arg
65
Leu
```

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<212> PRT
<213> Enterobacter cloacae
<400> 10369
Lys Gln Leu Ala Pro Gly Asn Arg Ala Ala Arg Lys Gly Glu Arg Ala
                                    10
Gly Ala Ala Pro Gln Lys Glu Asp Arg Arg Arg His Gly Arg Gly Val
                                25
Gln Lys Gly Gln Lys Pro Ala Glu Gly Asn Asn Asn Gln Gln Lys Gln
Glu Ile Gln Thr Ala Gln Asn Glu Pro Asp Lys Gln Ser Lys Thr Arg
Thr Asp Gly Arg Gly Lys Thr Gly Gln Pro Gln Lys Glu Gly Glu Glu
                    70
                                        75
Lys Gly Thr Gln Glu Glu Gln Ala Glu Arg Thr Gln Ser Ser Arg Ile
                85
Lys Ile Phe Thr Cys Pro
           100
<210> 10370
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 10370
Pro Gly Lys Gly Trp Phe Gly Leu Gly Lys Arg Asn Pro His Gly Ala
                                    10
Lys Gly Asn Tyr Asp Met Val Glu Thr Val Lys Gly Trp Lys Gly Thr
            20
Met Gly Asn Met Gly Tyr Leu Gly Asp Gly Phe Ala Arg Ile Thr Arg
Gly Asp Ala Ser Leu Phe Leu Gly Lys Asn Lys Thr Leu Val Arg Met
Met Arg Lys Arg Arg Gln
<210> 10371
<211> 65
<212> PRT
<213> Enterobacter cloacae
<400> 10371
Ile Leu Gln Leu Glu Ile Gln Phe His Lys Leu Leu Asp Ser Phe Pro
Asp Phe Asp Phe Phe Ser His Thr Leu Met Ala Arg Phe Pro Cys Leu
Phe Phe Ala Ser Leu Thr Ser Val Tyr Ser Ser Ser Thr Tyr Pro Thr
                            40
Leu His His Leu Lys Ser Ile Phe Leu Ile Pro Leu Ser Phe Ser
   50
<210> 10372
<211> 104
<212> PRT
<213> Enterobacter cloacae
<400> 10372
Arg Asp Leu Tyr Thr Val Leu Asn Gln Gly Glu Leu Met Asn Glu Leu
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Lys Ser Lys Asn Glu Asn Ser Thr Lys Ser Asn Phe Pro Pro Val Asp 25 Asn Gln Phe Cys Phe Tyr His Val Asp Phe Ser Ile Glu Arg Leu Leu 40 Ser Thr Ala Glu Asp Leu Gln Leu Glu Tyr Ile Phe Gln Lys Pro Gly 55 Ser Glu Val Arg Lys Asp Leu Val Glu Arg Phe Glu Arg Gly Glu Arg 70 Phe Val Thr Ala Ser His Cys Asp Asn Phe Cys Glu Ile Leu Gly Cys Gln Gly His Gln Glu Asn Ala 100 <210> 10373 <211> 85 <212> PRT <213> Enterobacter cloacae <400> 10373 Arg His Ile Pro Ala Cys Arg Ser Ala Asp Thr Ser Ala Arg Ala Phe 10 Phe Gly His His Ile Ser Gly Gln Glu Ile Leu Ser Gly Arg Gly Val Thr Glu Gln Gln Leu Gly His Cys Gln Gln Leu Ala Asp Leu Thr Pro 40 Leu Ile Ala Lys Leu Gly Phe Cys Ser Asp Val Asp Leu Pro Phe Trp 60 Ala Gly Phe Gly Leu Leu Thr Leu Thr Ser Ile Ile Arg Asn Val Leu 70 Asp Asp Ala Asp <210> 10374 <211> 61 <212> PRT <213> Enterobacter cloacae <400> 10374 Tyr Arg Leu Thr Ser Tyr Ser Tyr Met Pro Val Cys Arg His Gln Cys Leu Gly Tyr Phe Arg Ser Lys Gln Asp Leu Ala Arg Asp Leu Ile Lys Arg Gly Val Thr Glu Gln Gln Leu Gly Ala Leu Ser Ser Ala Cys Lys Phe Asn Pro Leu Asn Arg Gln Thr Trp Val Gln Ser <210> 10375 <211> 78 <212> PRT <213> Enterobacter cloacae <400> 10375 Val Met Pro Met Phe Thr Arg Ile Gln Lys Asp Asn Gly Trp Asp His 10 Leu Asn Asp Leu Arg Glu Lys Phe Asn Gly Lys Val Phe Lys Val Asn 25 Glu Gln Ile Ile Ser Arg Phe Gln Ile Lys Asn Thr Pro Ala Ile Ile 40 45 Thr Thr Asp Gln Asp Lys Phe Arg Ile Thr Leu Phe Ser Glu Ala Glu

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Val Arg Gly Ile Gly Ala Pro Asn Leu Ser Glu Glu Lys
                   70
<210> 10376
<211> 139
<212> PRT
<213> Enterobacter cloacae
<400> 10376
Phe Leu Arg Val Lys Ile Met Lys Leu Arg Lys Thr Ile Ala Ser Thr
                                   10
Ile Ile Ala Ser Met Ile Ala Asn Thr Met Ser Trp Ala Phe Tyr Ile
           20
                               25
Ser Leu Ile Asn Met Val Met Thr Pro Arg Ile Tyr Ala Ala Asp Ala
                           40
Ile Phe Asp Gln Leu Glu Ser Asn Phe Asn Leu Ala Asn Pro Asn Ala
                       55
Asn Arg Asn Ala Thr Thr Ser Ala Gln Asp Ile Val Glu Lys Tyr Lys
                   70
                                      7.5
Asn Ala Asp Ser Gly Glu Asn Val Ser Gly Lys Ile Thr Glu Lys Tyr
                                   90
               85
Val Gly Lys Ala Glu Ser Ala Asn Leu Asn Leu Gly Lys Tyr Gly Ala
           100
                               105
Gly Asn Ser Asn Glu Ser Val Met Lys Asn Ala Ala Ser Asp Gly Lys
                           120
Ser Ile Gly Ser Ala Val Gln Leu Pro Ser Met
                       135
<210> 10377
<211> 66
<212> PRT
<213> Enterobacter cloacae
<400> 10377
Lys Lys Lys Lys Tyr Pro Pro Gly Gln Ala Ser Ala Ser Tyr Ala
           20
                               25
Pro Glu Pro His Leu Thr Val Phe Met Thr Asp Tyr Phe Ile Pro Ile
Arg Pro Gly Pro Thr Ile Val Ser Ile Ala Thr Arg Arg Glu Glu Ser
Ile Gly
<210> 10378
<211> 66
<212> PRT
<213> Enterobacter cloacae
<400> 10378
Ser Tyr His Val Thr Met Val Leu Ser Gly Leu Leu Asn Gln Lys Ile
                                  10
Asn Trp Ser Thr Gly Ser Arg Gly Ile Leu Arg Lys Gln Cys Lys Arg
                               25
Asp Ser Ser Glu Ser Phe Phe Ile Cys Ile Glu Lys Gly Ser Ile Met
                           40
Asn Glu Asn Ile Leu Gln Gly Asn Arg Lys Asn Leu Ser His Tyr Pro
Arg
65
```

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<210> 10379
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10379
Met Lys Thr Tyr Tyr Lys Val Thr Gly Lys Thr Cys His Thr Ile His
                                    10
Ala Glu Leu Arg Lys Ile Gly Asp Leu Ile Asn Pro Ile Pro Asn Lys
                                25
Lys Tyr His Ile Lys Arg Met Met Thr Lys Ala Thr Arg Leu Leu Leu
Ile Lys Ser Ile Ser Glu Arg Ile Lys Asn Asn Arg
<210> 10380
<2:11> 307
<212> PRT
<213> Enterobacter cloacae
<400> 10380
Met Asn Ala Ile Gln Lys Leu Val Glu Ser Ile Leu Val Lys Met Gly
Phe Val Gly Ala Val Val Glu Asn Ile Tyr Leu Asp Ser Lys Pro Phe
            20
                                25
Arg His Ile Arg Phe Val Ala Asp Ile Pro Val Ile Ser Phe Leu Pro
                            40
His Leu Val Lys Tyr Leu Lys Gly Ala Asp His Leu Tyr Cys Gly Asn
                        55
Asp Asp Leu His Pro Leu Phe Ile Tyr Phe Ser Glu Ala Ala Thr Leu
                    70
                                         75
Lys Ala Gly Pro Val Asn Leu Ala Asn Phe Arg Phe Glu Val Ser Ile
                85
                                     90
Ala Ser Thr His Leu Arg Leu Val Ser Glu Gln Pro Asp Leu Leu Ile
            100
                                105
Lys Gly Phe Asn Arg Asp Asn Leu Glu Tyr Val Tyr Tyr Arg Ser Asp
                            120
Leu Ala Ser Lys Asp Leu Ile Leu Gly Leu Val Glu His Gly Ser Pro
                        135
                                             140
Phe Ile Lys His Leu His Gly Leu Ile Gln Lys Arg Ile Leu Asn Glu
                    150
                                         155
Phe Ser Leu Ile Phe Ser Val Leu Glu Lys Ile Leu Glu Ser Ala Lys
                165
                                    170
Pro Gln Ile Leu Ala Cys Phe His Ser Val Asp Tyr Glu Met Asn Val
                                185
Lys Ile Ile Ala Glu Ala Ile Pro Glu Thr Val Ser Asn Gln Ile Val
                            200
Thr Ser Asp Tyr Ile Val Asn Ser Ile Ser Asp Ala Asp Lys Phe Ile
                        215
                                             220
Asn His Val Arg Arg Tyr Leu Ala Gly Arg Val Met Lys Arg Arg Ile
                    230
                                         235
Tyr Ala Glu Leu Asp Val Cys Glu Glu Thr Ser Asn Ile Ser Leu Val
                245
                                    250
Asn Leu Gly Cys Phe Thr Ser Pro Leu Leu Val Thr Glu Tyr Gln Met
            260
                                265
                                                     270
Phe Lys Pro His Ser Ser Gly Leu Tyr Arg Lys Ala Ile Asn Asn Ser
                            280
                                                285
Leu Lys Gln Phe Lys Pro Glu Met His Val Pro Ser Glu Glu Leu Phe
                . 295
                                             300
    290
Tyr Asn
```



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<210> 10381
<211> 177
<212> PRT
<213> Enterobacter cloacae
```

<210> 10382 <211> 223 <212> PRT

<400> 10381 Met Phe Lys Glu Ser Asp His Val Glu Phe Val Ser Ala Phe Leu Tyr Gln Asn Leu Gly Leu Asn Val Pro Ala Asp Asp Ile Thr Val Gln Leu 25 Ser Asp Thr Ser Phe Asp Lys Val Thr Phe Asp Tyr Asp Val Asp Ile 40 Asp Asn Leu Asn Cys Met Leu Asp Leu Tyr Ile Ser Glu Leu Ile Lys 55 His Asn Ala Ser Tyr Ser Asp Ser Ile Leu Leu Lys Gln Lys Ile Ile 70 75 Tyr Phe Leu Gly Val Phe Lys Asn Phe Gly Phe Phe Thr Phe Asp Ile 85 90 Arg Gly Tyr Ser Asn Thr Leu Ser Pro Val Lys Val Ile Asp Ile Val 100 105 110 Ser Met Ile Ile Asn Asp Cys Glu Glu Leu Ser Lys Ala Asn Ser Ser 120 Thr Asp Ala Ile Arg Asn Leu Tyr Leu Asp Lys Met Lys Val Asp Gly 135 140 Lys Val Leu Val Ala Lys Phe Ala Leu Lys Gln Phe Phe His Ser Asp 155 150 Phe Gly Asp Phe Ile Ser Phe Val Glu Glu Lys Asn Tyr Arg Leu Ser

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<213> Enterobacter cloacae
<400> 10382
Ser Phe Ile Val Asn His Leu Arg Phe Pro Ile Val Leu Arg Glu Gly
                                    10
Cys Lys Ile Glu Arg Gly Glu Val Tyr Ser Ile Ser Asn Cys Thr Tyr
                                 25
Asn Lys Glu Arg Leu Gln Tyr Leu Phe Ser Gln Asp Ile Tyr Gly Lys
Leu Tyr Asn Ser Leu Glu Lys Glu Leu Ser Ser Phe Phe Ser Phe Ile
                        55
Asn Val Glu Val His Glu Leu Leu Lys Asp Ala Val Cys Phe Ala Leu
Lys Ile Leu Asn Lys Ile Ser Leu Asp Thr Pro Glu Arg Leu Ile Lys
                85
Ala Phe Asn Tyr Arg Asp Trp Tyr Cys Ser Tyr Asp Val Glu Leu Phe
                                105
            100
                                                     110
Arg Lys Gly Leu Pro Gly His Ile Leu Glu Glu Leu Ile Ala Pro Asp
        115
                            120
                                                 125
Ile Leu Leu Ser Asp Leu Asn Gly Cys Arg Lys Ile Leu Arg Asn Ala
                        135
                                             140
Lys Arg Phe Leu Asn Gly His Thr Lys Thr Asn Cys Val Tyr Ile Lys
                    150
                                        155
Tyr Glu Trp Trp Leu Gly Pro Val Asp Thr Ser His Ser Ala Lys Leu
                                    170
```



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Met Ser Asp Lys Glu Ile Asn Asn Arg Ser Asp Leu Lys Asn Phe Ser
            180
                               185
Lys Val Phe Phe Lys Glu Cys Leu Ser Ser Gly Lys Ser Glu Tyr Glu
                            200
Asn His Leu Ser Glu Lys Glu His Ala Leu Arg Tyr Asn Tyr
                       215
<210> 10383
<211> 166
<212> PRT
<213> Enterobacter cloacae
<400> 10383
Leu Arg Asn Leu His Leu Asn Ser Phe Phe Ile Pro Thr Leu Val Thr
                                     10
Leu Ser His Leu Ser Lys Lys Arg Ile Thr Asp Cys Leu Asn Glu Thr
                                25
Leu Arg Ile Ile Lys Ala Val Glu His Gly Phe Val Arg Val Gly Gln
                            40
                                                 45
His Lys Ile Asn Arg Arg Ile Asn Asp Asp Leu Lys Leu Cys Ile Asp
                        55
Phe Asn Thr Asp Asp Tyr Pro Ala Asn Met Pro Asp Ile Tyr Ile Lys
                    70
Phe Asn Asp Thr Phe Asp Gly Asn Gly Ala Leu Tyr Cys Asp Asn Asp
                                     90
Ala Leu Ile Ser Leu Tyr Thr Asp Val Ala Ser Ile Ile Asn Val Pro
            100
                                105
                                                     110
Val Met Met Glu Val Arg Leu Ile Asn Lys Arg Gly Arg Val Val Cys
                            120
Asp Ser Ser His Ser Thr Tyr Val Ser Leu Glu Ser Asn Asp Arg Tyr
                        135
                                             140
Arg Val Thr Asp Arg Thr Leu Leu Ile Thr Glu Ala Phe Asp Asp Phe
145
                    150
                                         155
Arg Asn Ala Ser Gln
                165
<210> 10384
<211> 90
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(24)
<400> 10384
Pro Asn Phe Tyr Leu Thr Gln Trp Gly Ser Arg Phe Pro Ser Gly Ala
Leu Pro Leu Lys Phe Glu Val Xaa Tyr Met Thr His Ser Ser Asp Asp
                                25
Lys Asn Tyr Val Arg Ala Val Leu Ser Tyr Leu Gly Ile Asp Phe Asp
                            40
Glu Ala Asp Ile Val Leu Ser Val Cys His Cys Gln Ser Asp Glu Leu
                        55
Ser Phe Thr Cys Asn Ile Lys Ala Ile Glu Leu Lys Asn Ala Val Asp
                    70
                                         75
Leu Tyr Val Asp Ser Ile Ser Glu Gln
                85
<210> 10385
```



<211> 65

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<212> PRT
<213> Enterobacter cloacae
<400> 10385
Ile Arg Tyr Leu Trp Ile His Leu Lys Asp Leu Leu Lys Leu Leu Ile
                                    10
Ile Val Thr Gly Ile Val Val Thr Met Leu Ser Phe Leu Gly Lys Ala
                                25
Tyr Leu Val Ile Phe Trp Lys Ser Ser Leu Leu Gln Ile Ser Tyr Phe
Gln Thr Leu Thr Val Val Glu Lys Tyr Leu Glu Met Gln Asn Asp Phe
65
<210> 10386
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 10386
Ile Gln Gln Ile Ala Val Lys Asn Ser Thr Ala Leu Asn Asp Lys Lys
                                    10
Ile Pro Phe Asn Thr Thr Lys Ile Thr Leu Ala Ile Ile Ile Asn Phe
                                25
Ile Tyr Tyr Arg His Ser Val Leu Asn Val Cys Leu Ser Leu Ile Glu
        35
                            40
                                                 45
Pro Asp Ala Ser His Ser Val Phe Phe Tyr Leu Ser Leu Arg Gln Pro
                        5.5
Thr Phe Asn Val Leu Pro Leu Gly Asn Asp Asn Asp Tyr
                    70
<210> 10387
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10387
Val Asn Phe Asp Tyr Phe His Leu Trp Asp Ile Lys Ser Leu Ile Leu
                                    10
Phe Thr Ser Arg Leu Ile Pro Thr Lys Ile Phe Gln Met Ile Leu Arg
                                25
Ala Leu Gln His Ile Asn Gln Asn Leu Lys Asp Cys Ser Glu Glu Pro
Ala Phe Leu Leu Pro Tyr Tyr Leu Ala Ile Phe Phe
<210> 10388
<211> 77
<212> PRT
<213> Enterobacter cloacae
<400> 10388
Arg Gln Gly Leu Thr Gln Arg Glu Leu Ser Ala Met Leu Gly Val Thr
                                    10
Gln Gln Thr Tyr Ala Arg Leu Glu Ala Asn Pro Ser Lys Ala Ser Phe
                                25
Glu Arg Leu Tyr Lys Val Leu His Ile Leu Gly Val Glu Ile Ser Leu
                            40
                                                 45
Ser Ser Ala Pro Leu Ser Thr Tyr Thr Lys Pro Thr Asn Phe Val Glu
```

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Lys Glu Phe Asp Ser Pro Ala Arg Arg Glu Glu Trp
                    70
<210> 10389
<211> 169
<212> PRT
<213> Enterobacter cloacae
<400> 10389
Lys Leu Thr Phe Ser Val Leu Ile Thr Ala Cys Gly Asp Lys Asp Gly
Gln Val Lys Asn Gln Ser Val Arg Ile Val Asp Ile Gln Gln Val Ile
                                25
Ile Asn Ser Gly Leu Ala Glu Gln Glu Ala Glu His Leu Lys Ser Val
                            40
Arg Lys Thr Leu Ala Asp Gly Leu Thr Leu Ala Gln Ala Gln Tyr Glu
                        55
Asn Leu Pro Glu Glu Lys Lys Asn Glu Ala Lys Gln Asn Asp Asn Lys
                    70
                                        75
Leu Ile Glu Tyr Gln Trp Gln Asn Glu Arg Phe Leu Ala Arg Lys Ala
                85
                                    90
Val Gly Gln Thr Ile Gln Asn Ala Ile Asp Lys Trp Arg Ile Lys Asn
            100
                                105
Asn Ile Ser Ile Ile Ile Pro Arg Gln Gln Ala Leu Ser Leu Asp Glu
                            120
Gly Leu Asp Ile Thr Pro Leu Ile Val Lys Glu Leu Lys Gly Ala Lys
                        135
                                             140
Val Lys Phe Gly Glu Leu Pro Val Ile Ser Leu Lys Gln Lys Glu Asn
                    150
                                        155
Ser Pro Ser Glu Lys Glu Asn Gly
                165
<210> 10390
<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 10390
Ser Phe Lys Leu Ile Asn Lys Arg Gln Val Leu Met Leu Ser Asn Ile
Arg Met Asp Arg Ile Lys Asn Gln Ser Leu Arg Leu Val Asp Ile Gln
Gln Val Ile Ile Ser Gly Leu Asp Arg Gln Glu Ala Asn His Leu
                            40
Lys Lys Leu Gln Gly Lys Ser Ser Ser Met Asp Leu Arg Leu Leu Arg
    50
                        55
Arg Ser Val
<210> 10391
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 10391
Ser Pro Glu Lys Thr Ser Gly Glu Lys Phe Ile Asp Gly Leu Ala Leu
                                    10
Ala Gln Ala Leu Ser Met Lys Ile Tyr Ile Lys Arg Arg Gln Met Arg
                                25
Gln Tyr Asp Asn Lys Phe Ile Glu Tyr Leu Gly Arg Arg Ser Gly Lys
```

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Leu Val Leu Leu Ser Thr Lys Gly Leu Leu Ser Asn Lys Thr Thr Val
                        55
Ser Ala Phe Leu Gly Ile
<210> 10392
<211> 239
<212> PRT
<213> Enterobacter cloacae
<400> 10392
Ile Ala Cys Gly Leu Thr Phe Lys Asn Ser Cys Lys Gly Gln Met
Leu Ser Ser Lys Lys Arg Lys Ser Pro Thr Asn Ile Lys Glu Ser Leu
            20
Asn Asp Asn Ala Asp Arg Phe Tyr Lys Met Phe Arg Ile His Thr Thr
                            40
Ala Lys Val Ala Met Ser Leu Ile Ala Met Thr Ala Val Gly Phe Ser
                        55
Phe Tyr Asn Leu Tyr Glu Gln Trp Gln Asp Ala Glu Gly Lys Lys Asp
                    70
                                        75
His Ile Ala Val Ile Arg Ile Ser Gly Glu Met Gly Thr Gly Ser Glu
                                    90
                85
Thr Gly Asp Gly Thr Val Ile Ala Thr Ala Leu Ala Lys Ala Tyr Asn
            100
                                105
Asn Pro His Ala Lys Ala Val Ile Ile Glu Ala Glu Ser Gly Gly Gly
                            120
        115
Gly Pro Ser Asp Ala Ile Ile Ile Tyr Arg Gln Ile Asn Ala Leu Lys
                        135
Asn His Gln Pro Gln Ile Glu Arg Val Ser Asp Ala Gly Gly Ser Leu
                    150
                                        155
Ser Ser Val Ala Ala Asp Lys Ser Asn Lys Thr Gly Ser Thr Glu Arg
                165
                                    170
Gly Asp Glu Ala Arg Ser Lys Gln Asn Ser Leu Glu Val Leu Ser Ser
                                                    190
                                185
Gly Thr Gly Arg Phe Phe Ser Asp Ile Ala Asp Ser Tyr Lys Pro Ile
                            200
        195
Ile Val Ser Val Lys Gly Ile Cys Ala Ser Ala Cys Tyr Tyr Ala Val
                        215
                                            220
Ser Pro Ala Asp Ala Ile Tyr Ala Asp Ser Asn Ala Leu Ile Gly
                    230
<210> 10393
<211> 195
<212> PRT
<213> Enterobacter cloacae
<400> 10393
Thr Ser Tyr Arg Arg Gly Ile Lys Pro Gln Ile His Pro Glu Thr Thr
His Ser His Ile Val Thr Ile Glu Asp Ser Pro Phe Leu Ser Arg Leu
Lys Phe Lys Ile Ile Thr Ala Ile Asp Gln Leu Pro Asp Pro Asn Gly
                            40
Leu Tyr Thr Asn Thr Phe Asn Ser Ile Ile Asp Arg Ala Leu Leu Thr
                        55
                                            60
His Leu Lys Thr Glu Gln Glu Lys Ile Asp Ser Pro Arg Val Cys Lys
                                        75
Asn Val Ile Ser Ala Phe Ala Asp Ser Thr Leu Ser Leu Pro Val Phe
```

Asn Ile Gly Leu Asn Glu Gln Tyr Arg Tyr Trp Thr Pro Trp Gly Ile

```
100
                                105
Asn Phe Ile Glu Phe Ser Arg Gln Ala Ala Lys Ala Arg Thr Ala Val
                            120
                                               125
Phe Val Pro Asp Val Gly Gln Ile Glu Trp Lys Ser Ala Glu His Lys
                        135
Glu Leu Ala Glu Leu Ser Leu Ile Asp Gln Ile Ile Pro Lys Gln Tyr
                   150
                                        155
His Trp Leu Leu Gly Ile Pro Thr Met Trp Arg Asn Asn Tyr Cys Asn
                165
                                    170
His Asp Gln Arg Leu Ala Leu Phe Arg Glu Trp Arg Glu Ser Asn Gly
                                185
Cys Gly
        195
<210> 10394
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 10394
Leu Phe Phe Val Asn Gly Gly Lys Ala Met Ala Ala Asp Asn Thr Ser
Arg Ala Ala Val Leu Arg Thr Met Leu Phe Phe Gly Met Val Ile Tyr
            20
                                25
Phe Gly Tyr Ser Leu Ala Phe Gln Asn Thr Glu Glu Leu Lys Tyr Gln
        35
                            40
Ile Thr Gln Glu Val Asn Ala Ser Arg Ser Ile Ile Ser Asn Asp Arg
                        55
Trp Lys Ser Val Ile Ala Asn Ser Glu Ala Thr Leu Asn Trp Leu Val
                                        75
                    70
His Asp Tyr Lys Leu Ile Asp Tyr Leu Asn Thr Ile Leu Ile Pro Asp
                                    90
Thr Lys Lys Pro Ala Arg Gly Ile Asn Ile Val Ala Glu Lys Phe Thr
            100
                                105
Ser Ile Asn Tyr Thr Met Ala Lys Asn Ile Pro Leu Leu Tyr Gln
                            120
                                                125
Ser Ile Phe Arg Trp Asn Leu Ile Leu Gly Trp Leu Ile Val Phe Leu
                        135
                                            140
Pro Tyr Leu Phe Ala Met Leu Ala Asp Gly Met Tyr Gln Trp Lys Leu
                    150
                                        155
Lys Arg Tyr Val Phe Gly Lys Val Thr Val Gln Phe Tyr Arg Ile Trp
                                    170
Phe Arg Ala Phe Trp Val Ile Ser Ala Leu Thr Met Val Tyr Leu Val
                                185
                                                    190
Met Pro Asn Met Ser Leu Phe Asn Asn Ile Ala Gln Leu Phe Pro Pro
                            200
Val Ala Leu Leu Ile Leu Gly Ile Ala Leu Asn Arg Leu Trp Ser Asn
                        215
Phe Gln Lys Leu Met
                    230
<210> 10395
<211> 170
<212> PRT
<213> Enterobacter cloacae
<400> 10395
Gly Ser Met Asn Asn Ile Phe Leu Gln Phe His Ile Tyr Gly Leu Asp
             5
                                    10
Ala Ser Lys Asp Tyr Ser Leu Ser Ile Ile Thr Arg Asn Gly Ser Gln
                                25
```

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Pro Ala Thr Val Ile Asn Ile Asp Asp Pro Lys Asn Arg Asp Leu Ala
                            40
Leu Leu Lys Val Glu Lys Asn Thr Ile Val Lys Ala Pro Pro Asn Trp
                        55
                                            60
Lys Leu Pro Val Cys Asp Asn Val Leu Ala Pro Gly Glu Ser Val Trp
                    70
                                        75
Val Leu Ser Gly Met Tyr Asn Thr Leu Ser Asn Thr Tyr Ala Ser Pro
                85
                                    90
Asp Ser Thr Tyr Tyr Lys Gly Ile Val Gly Ser Asp Gly Leu Thr
            100
                                105
Ala Phe Tyr Gln Asn Gly Val Ser Gly Ser Ala Val Leu Asn Gln Ser
                            120
Lys Ser Cys Leu Tyr Gly Val Val Ser Gln Gln Asp Ile Lys Lys Ile
                        135
Asn Val Tyr Gln Ile Tyr Ile Thr Lys Ile Thr Thr Asn Glu Ile Ile
                    150
                                        155
Arg Gly Phe Ile Gly Tyr Lys Asn Asn
                165
<210> 10396
<211> 86
<212> PRT
<213> Enterobacter cloacae
<400> 10396
Met Ser Val Ile Leu Gln Gln Ala Ile Pro Thr Leu Ser Ala Leu Val
                                    10
Tyr Leu Ser Glu Pro Leu Lys Gly Thr Ser Ile Met Tyr Lys Leu Leu
                                                    30
            20
                                25
Pro Ala Ile Leu Val Phe Leu Ser Val Phe Leu Gly Leu Ile Ala Leu
                            40
Leu Ser Ala Ile Lys Asn Gly Ser Asp Glu Leu Ala Val Phe Leu Ile
                        55
Thr Leu Ser Ala Trp Phe Ala Ala Leu Ser Lys Phe Tyr Ser Leu Lys
                                        75
                    70
Leu Tyr Lys Asn Ser
<210> 10397
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10397
Arg Lys Ser Thr Thr Ala Leu Ser Tyr Tyr Ile Tyr Gly Ala Lys Glu
Asp Gly Gly Glu Val Val Leu Arg Pro Phe Ile Val Asn Pro Asp Glu
                                25
Leu Met Leu Thr Pro Ala Asp Val Val Glu Phe Asn Ser Gln Val Ile
                            40
Asn Val Asp Arg Gln Arg His Pro Glu Trp Phe Arg
   50
                        55
<210> 10398
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10398
Pro Pro Pro Phe Leu Gly Gly Leu Gly Ala Trp Gly Met Val Tyr
```

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Met Thr Lys Gln Gly Leu Glu Gly Ser Thr Gln Gln Leu Lys Ala Asn
            20
                                25
Trp Gln Asp Leu Pro Asp Ser Val Pro Asp Val Lys Gly Tyr Thr Gly
                      . 40
Trp Asp His Met Arg Cys Asp Met Asp Ala Gly Arg
    50
                       55
<210> 10399
<211> 237
<212> PRT
<213> Enterobacter cloacae
<400> 10399
Leu Met Lys Gly Leu Cys Thr Val Leu Ala Ala Thr Ser Val Val Leu
Ala Thr Gly Cys Gln Ala Lys Glu Pro Pro Thr Gln Val Val Tyr Arg
            20
                                25
Phe Asp Asp His Arg Phe Leu Glu Leu Lys Gly Trp Gly Cys Glu Gly
        35
                            40
Glu Leu Trp Tyr Thr Asp Thr Leu Arg Gly Ile His Thr Arg Pro Val
                        55
Ser Gln Phe Tyr Arg Ile Phe Thr Lys Lys Phe Val His Pro Ser Glu
                                        75
                    70
Arg Tyr Ile Ala Ile Pro Thr Trp Asp Asp Pro Gly Thr Met Ile Ser
                                    90
                85
Lys Asp Tyr Gly Lys Thr Trp Ser Pro Gln Phe Phe Ser Val Gly Pro
            100
                                105
Asn Glu Pro Asp Gly Thr Asn Gln Pro Ser Tyr Glu Asp Ile Ile Ser
                            120
                                                 125
Phe Thr Val Val Asn Asp Gln Gly Phe Leu Leu Thr Lys His Arg Leu
                        135
                                             140
Tyr Met Ser Ser Lys Pro Phe Glu Asp Pro Arg Ile Leu Pro Gly Gly
                    150
                                        155
Pro Gly Ile Ala Tyr Thr Val Asp Asp Gly Met Arg Asn Lys Val Ser
                                    170
                165
Asp Thr Leu Asp Pro Arg Phe Pro Gly Trp Ala Trp Gly Met Val Tyr
            180
                                185
Met Thr Lys Gln Gly Leu Lys His Ser Thr Gln Gln Phe Lys Ala Asn
        195
                            200
Trp Gln Asp Leu Pro Asp Ser Val Pro Glu Val Lys Gly Tyr Thr Gly
                        215
                                             220
Trp Asp His Met Arg Cys Asp Met Asp Ala Gly Arg
                    230
<210> 10400
<211> 237
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(212)
<400> 10400
Leu Met Lys Gly Leu Cys Thr Val Leu Ala Ala Thr Ser Val Val Leu
                                    10
Ala Thr Gly Cys Gln Ala Lys Glu Pro Pro Thr Gln Val Val Tyr Arg
            20
                                25
Phe Asp Asp His Arg Phe Leu Glu Leu Lys Gly Trp Gly Cys Glu Gly
```

Glu Leu Trp Tyr Thr Asp Thr Phe Arg Gly Ile His Thr Arg Pro Val

```
55
                                            60
Ser Gln Phe Tyr Arg Ile Phe Thr Lys Lys Phe Val His Pro Ser Glu
                    70
                                        75
Arg Tyr Ile Ala Ile Pro Thr Trp Asp Asp Pro Gly Thr Met Ile Ser
               85
                                    90
Lys Asp Tyr Gly Lys Thr Trp Ser Pro Gln Phe Phe Ser Val Gly Pro
                                105
Asn Glu Pro Asp Gly Thr Asn Gln Pro Ser Tyr Glu Asp Ile Ile Ser
                            120
Phe Thr Val Val Asn Asp Gln Gly Phe Leu Gln Thr Lys His Arg Leu
                        135
                                            140
Tyr Met Ser Ser Lys Pro Phe Glu Asp Pro Arg Ile Leu Pro Gly Gly
                    150
                                        155
Pro Gly Ile Ala Tyr Thr Val Asp Asp Gly Met Gly Asn Lys Val Ser
                165
                                    170
Gly Lys Leu Asp Pro Arg Ser Pro Gly Trp Ala Trp Gly Met Val Tyr
                                185
Met Thr Lys Gln Gly Leu Glu Gly Ser Thr Gln Gln Leu Lys Ala Asn
        195
                            200
Trp Gln Asp Xaa Pro Asp Ser Val Pro Asp Val Lys Gly Tyr Thr Gly
                        215
                                            220
Trp Glu His Met Gln Cys Asn Met Asp Ala Gly Lys
                    230
<210> 10401
<211> 68
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(29)
<400> 10401
Gly Asp Lys Ala Met Lys Gly Val Ile Arg Leu Asn Asp Pro Leu Ile
Ser Gly Arg Lys Val Thr Lys Ala Ser Gly Ala Asn Xaa Met Gly Gln
            20
Pro Val Ala Leu Lys Asp Asp Leu Ala Gln Cys Pro Leu His Lys Gly
                            40
Lys Phe Ala Ile Thr Asp Cys His Gln Pro Gly Thr Cys Ile Gly Leu
   50
                        55
Gly Leu Trp
65
<210> 10402
<211> 66
<212> PRT
<213> Enterobacter cloacae
<400> 10402
Met Ala Lys Leu Thr Asp Ile Tyr Ser Tyr Pro Ser Leu Ile Glu Ile
                                    10
Ala Tyr Gln Ala Leu Ser Tyr Leu Ser Phe Asn Leu Ser Thr Val Tyr.
                                25
Ile Arg Lys Arg Asp Lys Lys Gln Phe Leu Tyr Asn Leu Phe Phe Val
                            40
Ser Lys Gly Asp Ser Phe Asp Thr Ala Glu Lys Gly Leu Lys Arg Cys
                        55
Val
65
```

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<210> 10403
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10403
Thr Gly Asp Gln Asp Arg Glu Trp Phe Gly His Glu Cys Phe Arg Arg
                                    10
Gly Gly Glu Tyr Gln Leu Lys Ala Gly Val Tyr Gln Ser Trp Ser
                                25
His Ser Leu Leu Val Lys Val Arg His Ile Ile Lys Thr Lys Arg Gly
                            40
Lys Lys Leu Phe Ala Gln Gly Asn Ile Pro Leu Arg Lys
<210> 10404
<211> 101
<212> PRT
<213> Enterobacter cloacae
<400> 10404
Ala Arg Asp Ser Ala Arg Pro Val Arg Gln Asp Glu Gly Ala Lys Ala
Gly Ala Leu Val Pro Ala Thr Arg Gln Ile Thr Val Lys Pro Val Arg
            20
                                25.
His Gly Ser Asp Gln Glu Asn Lys Arg Thr Gly Lys Arg Arg Pro Asp
                            40
Asp Arg Gln Val Lys Cys Gln Asp Glu Glu Arg Asn Glu His Asn Ala
                        55
Lys Glu Ser Glu Gln Arg Arg Asp Ile Lys Ser His Asp Asp Gly Asn
                    70
                                        75
Cys Leu Leu Ser Val Lys Phe Ser Ser Met Leu Leu Gln Ser Pro Gln
                                    90
Cys Phe Asn Glu
            100
<210> 10405
<211> 74
<212> PRT
<213> Enterobacter cloacae
<400> 10405
Ile Met Asn Ile Thr Asp Lys Glu Leu Ile Ser Asn Thr Val Arg Gln
                                    10
                                                         1.5
Tyr Gly Trp Asn Leu Arg Glu Phe Asn His Ser Thr Pro Phe Thr Ser
His Phe Ile Tyr Ile Thr Asp Tyr His Lys Asp Asn Thr Trp Met Ile
                            40
Ser Leu Ser Gln Glu Asp Phe Asn Thr Thr Lys Ile Leu Thr Ser Leu
Ser Leu Gly Lys Val Arg Thr Ser Ser
                    70
<210> 10406
<211> 172
<212> PRT
<213> Enterobacter cloacae
<400> 10406
Met Val Glu Ala Arg Tyr Gln Gly Lys Pro Val Ser Ser Leu Pro Glu
```

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10
Glu Ala Phe Ala Glu Gly Leu Ser Arg Ser Gly Leu Ser Pro Val Leu
                                25
Leu Leu Ala Ser Pro Thr Thr Val Pro Val Thr Thr Asp Glu Arg Trp
                                                 4.5
                            40
Trp Leu Ala Lys Glu Asn Val Ser Gly His Tyr Gly Arg Ile Phe Tyr
                        55
                                            60
Ala Ala Val Arg Glu Leu Val Ile Arg Ser Asp Ile Ile Ser Val Val
                    70
                                        75
Arg Ser Ile Ala Asp Glu Asn Phe Thr Ser Glu His Met Gly Tyr Phe
                85
                                    90
Glu Arg Leu Thr Ser Asp Glu Lys Glu Val Val Phe Ser Asp Tyr Leu
                                105
Arg Thr Leu Ala Glu Gly Gly Leu Thr Cys Thr Glu Lys Asn Leu Val
                            120
Lys Leu Thr Gln Asp Leu Tyr Pro Ile Asp Ala Thr Pro Asp Asn Ile
                        135
                                            140
Arg Lys Leu Ser Thr Asp Arg Asp Ala Leu Asn Glu Leu His Ile Asp
                    150
                                        155
Gly Met Val Leu Phe Ile Thr Gly Pro Ala Leu
<210> 10407
<211> 167
<212> PRT
<213> Enterobacter cloacae
<400> 10407
Arg Ser Asn Met Ile Val Asn Lys Asn Arg Phe Met His Lys Asn Gly
Lys Arg Phe Lys Ser Ile Gly Arg Tyr Leu Arg Phe Trp Gln Ala Val
            20
                                25
Ala Ser Ser Gly Leu Pro Met Asp Met Val Ile Arg Glu Lys Pro Tyr
                            40
Gln Leu Met Val Ala Leu Ile Ala Leu Tyr Thr Ala Ile Pro Val Val
                        55
Thr Ile Val Ile Leu Ser Gly Gln Gln Ser His Lys Leu Glu Leu Ile
                    70
                                        75
Ala Val His Phe Ser Thr Ile Ile Thr Met Val Phe Val Leu Arg Arg
                                    90
                85
Lys Met Gly Lys Arg Trp Leu Asp Leu Phe Glu Glu Lys Leu Ala Ile
            100
                                105
                                                     110
Tyr Lys Pro Asn Asp Lys Leu Ala Leu Ser Glu Leu His Glu Ser Ile
                            120
Arg Glu Lys Asn Gly Leu Asp Leu Gln Asp Leu Gln Asp Trp Tyr Trp
                        135
                                            140
Lys Glu Lys Met Thr Tyr Glu Tyr His Lys Glu Arg Lys Thr Thr Ile
                    150
                                        155
Ser Tyr Gln Lys Phe Lys
                165
<210> 10408
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10408
Tyr Gly Phe Ser Arg Ile Thr Met Ser Met Gly Lys Pro Glu Asp Ala
```

10

Thr Ala Cys Gln Asn Leu Lys Tyr Leu Pro Met Asp Leu Asn Leu Phe

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Pro Phe Leu Cys Ile Asn Leu Phe Leu Phe Thr Ile Met Leu Asp Leu
                            40
Tyr Phe Ser Val Ile Leu Glu Glu Cys Tyr Leu Asn Pro
                        55
<210> 10409
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 10409
Ile Thr Pro Lys Leu Cys Thr Ser Ser Met Phe Leu Ala Cys Trp Leu
                                    10
Ser Ile Leu Met Ala Ala Ile Ala Phe Ala Leu Ser Lys Ser Ala Ala
                                25
Lys Met Ala Ile Ala Ile Leu Phe Met Ile Cys Ala Pro Arg Leu Arg
                            40
Ala Val Ile Arg Gly Asn Ala Leu Leu Leu Cys Ser Gly Phe Leu Ile
   50
                        55
Lys Val
65
<210> 10410
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 10410
Arg Asp Pro Pro Gly Phe Leu Ile Pro Pro Phe Ser Ala Ser Pro Cys
                                    10
Arg Lys Arg Gly Lys Arg His Lys Thr Thr Ile Leu Gln Ile Gly
            20
                                25
Asp Leu Ala Gly Cys Phe Ile Ala Pro Leu Asn Asp Ile Leu Pro Val
                            40
Val Arg Ser Lys Ile Val Asp Asn Tyr Asn Ile Pro Leu Asn
   50
                        55
<210> 10411
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 10411
Arg Arg Trp His Met Glu Ile Asp Leu Asp Asn Leu Leu Phe Asn Gly
                                    10
Leu Asp Glu Ala Glu Glu Arg Asn Ala Glu Arg Leu Asp Asp Ala Asp
Lys Lys Ala Gln Ala Ile Val Ala Asp Asp Cys Gly Glu Cys Leu
                                                45
                            40
Gln Asp Leu Lys Lys His Arg Ala Pro Arg Cys Phe Phe Tyr Glu
                        55
Cys Leu Leu Pro Asp Ile Arg Ser Pro Ala Phe Cys
                    70
<210> 10412
<211> 77
<212> PRT
<213> Enterobacter cloacae
<400> 10412
```

Pro Gly Lys Lys Gln Arg His Arg Cys Glu Gln Ile Lys Leu His Ala

10 Lys Val Leu Val Ile Thr Lys Arg Val Asn His His Phe Glu Asn Phe 25 Lys Gln Ile Pro Gln Cys Gln Gln Tyr Gly Glu Pro Gly Lys Ile Asp 40 Asn Leu Pro Asn Ser Thr Met Val Tyr Gly Phe Thr Glu Ile Arg Thr 55 Val Lys Glu Ser Gln Met Lys His His Ile Pro Lys Ser <210> 10413

<211> 370

<212> PRT

<213> Enterobacter cloacae

<400> 10413

Val Asp His Phe Leu Pro Val Val Asp Lys Met Ala Leu Asn Tyr Ile 10 Arg Ala Glu Arg Glu Ala Glu Glu Pro Tyr Arg Gln Met Leu Ser Gln 20 25 Ala Leu Ala Asp Gly Asn Ile Gly Gln Pro Asn Leu Arg Ser Glu Leu Ile Asp Arg Cys Ile Val Ala Trp Arg Ala Asp Asn Arg Gly Ala Thr 5.5 Leu Glu Ala Ala Met Ser Thr Glu Lys Gly Ser Lys Glu Leu Leu Asn 70 75 Gln Leu Tyr Met Leu Ala Asp Val Gly Leu Lys His Leu Pro Gly Val 90 8.5 Arg Asn Phe Ile Ser Ser Lys Gly Tyr Glu Leu Val Arg Leu Ser Val 105 100 Asn Ala Ser Gly Lys Leu Val Ala Tyr Ala Ala Pro Ala Asn Phe Glu 120 Cys Asp Asn Arg Met Glu Gly His Ala Trp Val His Arg Met Val Leu 135 140 Ala Thr Ser Arg Asn Val Leu Asn Val Thr His Gln Arg Phe Ala Lys 150 155 Met Lys His Phe Leu Pro Ala Glu Asn Thr Leu Phe Glu Asp Glu Gln 170 165 Leu Val Ala Thr Trp Ser Gly Lys Lys Thr Ala Phe Lys Ser Phe Glu 180 185 190 Glu Lys Gln Arg Tyr Phe Asp Thr Cys Ser Arg Gly Ala Gln Ala Leu 200 Lys Gln Phe Leu Lys Leu Asn Asp Pro Val Ile Tyr Thr Asn Leu Leu 215 220 Gly Gln Trp Ile Glu Ala Tyr Glu Ser Ile Asn Glu Thr Ser Glu Tyr 230 235 Val Gln Gln Val Ser Leu Met Ala Pro Val Ala Val Lys Ser Glu Lys 245 250 Gly Lys Ala Ser Leu Ile Tyr Ile Gly Thr Lys Asp Leu Ala Asp Trp 265 Phe Tyr Gln Lys Ala Pro Thr Pro Glu Leu Gln Ala Leu Phe Leu Glu 280 Glu Tyr Leu Ser Lys Phe Glu Asn Lys Glu Val Asn Lys Glu Lys Leu 295 Leu Ser Arg Arg Asn Thr Ala Leu Ser Leu Ser Phe Tyr Thr Met Asp 310 315 Asn Gly Glu Val Pro Asp Glu Ile Leu Val Thr Lys Ser Val Asp Asn 330 325 Ala Arg Arg Trp Tyr Ser Gly Met Phe Thr Ser Met Pro Thr Met Leu 345 Asn Asp Gln Trp Ser Val Phe Thr Thr Gly Ala Gly Arg Ile Arg Ala

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355
                            360
                                                 365
Tyr Leu
   370
<210> 10414
<211> 92
<212> PRT
<213> Enterobacter cloacae
<400> 10414
Asn Trp Gln Ile Cys Tyr Thr Val Asn Leu His Arg Arg Val Ile Val
Arg Phe His Arg Arg Tyr Leu Leu Ser Lys Val Ser Arg Phe Ala Thr
                                25
Phe Phe Met Tyr Ser Leu Ser Gly Leu Glu Ser Phe Ile Val Gln Ser
Pro Glu Gly Ala Pro His Arg Leu Pro Glu His Trp Trp Ser Gln Leu
                        55
Lys Cys Asp Cys Ser His Pro Lys Ala Leu Ile Thr Gly Tyr Lys Ser
                    70
                                         75
Ile Gly Gly Arg Gln Cys Asp Ser Thr Thr Val
                85
<210> 10415
<211> 153
<212> PRT
<213> Enterobacter cloacae
<400> 10415
Arg Arg Gly Arg Arg Tyr Leu Met Tyr Arg Asn Asp Arg Asn Val Asp
                                    10
Ser Phe Asn Leu Val Asn Ala Leu Gln Pro Val Phe Arg Asn Thr Gly
            20
Cys Gly Met Phe Glu Tyr Asp Arg Lys Lys Gln Asn Glu Thr Ala Asp
                            40
Ser Ile Leu Arg Ala Leu Ala Leu Asn Ala Asp Phe Ala Arg Ala Leu
                        5.5
Lys Gln Tyr Val Arg Ile Asn Ser Val Arg Arg Val Val Gln Phe Asp
                    70
                                         75
Asp Gly Ser Val Arg Tyr Gly Ile His Ala Glu Phe Glu Gly His Asn
                85
                                    90
Lys Ile Asn Ser Phe Arg Ile Phe Lys Asp Glu Asp Thr Asp Ala Phe
            100
                                105
                                                     110
Asp Ser Tyr Phe Tyr Ser Val Cys Asp Asn Lys Ala Glu Leu Val Asp
        115
                            120
Phe Lys Met Asp Ser Leu Asp Ile Gln Leu Gln Ala Val Phe Glu Lys
                        135
Val Thr Gly Ile Phe Leu Ser His
                    150
<210> 10416
<211> 123
<212> PRT
<213> Enterobacter cloacae
<400> 10416
Lys Lys Leu Gln Cys Gly Leu Leu Ala Ser Arg Ser Glu Phe Tyr Ile
                                    10
Ile Pro Lys Asn Thr Gly Gly Ile Met Lys Thr Asn Leu Ala Tyr Ala
Ser Asn Cys Ser Asp Ser Val Tyr Ser Tyr Ile Tyr Gln Ala Leu Gln
```

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40
Lys Arg Ser Gly Ala Glu Asn Glu Ser Leu Tyr Gln Gln Ala Ile Ser
                        55
                                             60
Ser Cys Cys Thr Asp Lys Gln Lys Lys Leu Ala Gly Tyr Tyr Ala
                                        75
                    70
Gly Pro Trp Lys Leu Leu Phe Asn Ala Trp Cys Asn Asn Arg Val Pro
                                    90
                85
Asn Thr Ala Val Leu Ala Leu Leu Gln Gln Cys Leu Ser His Phe
            100
                                105
Gln Cys Glu Lys Val Ile Ala Ala Trp Gln
<210> 10417
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 10417
Asn Ile Asp Glu Met Asn Met Lys Asn Val Asn Ile Leu Asp Thr Asp
                                    10
Ile Ala Ala Ile Asn Ala Leu Ser Gly Val Lys Leu Thr Asp Phe Leu
            20
                                25
Thr Ala Gly Tyr Gln Val Asn Trp Leu Gly Glu Arg Glu Val Ser Leu
        35
                            40
Val Gly Phe Pro Cys Leu Ala Ser Asn Lys Gln Pro Val Glu Val Gly
                        55
Pro Gly Ile Phe Ile Asn Arg Val Tyr Ser Arg Asp Ser Gln Ser Leu
                    70
                                        75
Ser Gly Lys Leu Arg Tyr Asp Leu Ser Asn Gly Leu Ala Thr Ser Ala
                85
                                    90
Phe Ser Phe Phe Ser Gln Ser Gly Trp Tyr Gly Phe Arg Val Val
            100
                                105
                                                     110
Ser Phe Arg Asp Asn Gly Pro Ala Ala Leu Ile Asn Ile Gly Ile Val
                            120
                                                 125
His Glu Asn Val Leu Asn Ala Phe Cys Ala Asp Phe Pro Arg Ala Asn
                        135
                                            140
Val Ser Val Thr Arg Phe His Cys Gly Met Thr Leu Glu Gln Ile Arg
                    150
                                        155
Met Phe Ile Ser Asp Thr Ala Tyr Asp Met Pro Leu Tyr Asn Asn Glu
                165
                                    170
Ser Asp Phe Arg Arg Leu Ala Ser
            180
                                185
<210> 10418
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 10418
Asn Arg Gln Gln Ile Ser Thr Pro Ile Lys Lys Leu His Tyr Tyr Arg
                                    10
                                                         15
Ser Tyr Glu Ile Thr Ile Ile Ser Glu Tyr Tyr Asp Phe Phe Pro Tyr
                                25
Arg Thr Asn Arg Ser Arg His Leu Ala Thr Tyr Phe Phe Tyr Val Arg
                            40
                                                 45
Leu Gln Arg Ser Thr Leu Arg Glu Val Ser Lys Thr Gly Arg Ser Gln
                        55
Pro Val Pro Pro Pro Arg Ser Pro Ala Phe Arg Arg Lys His
                    70
```

<210> 10419

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<211> 81
<212> PRT
<213> Enterobacter cloacae
<400> 10419
Arg Ile Thr Leu Ser Ser Gly Gly Lys Thr Thr Asp Asp Asp Val Arg
                                    10
Ala Ser Gly Leu Tyr Trp Pro Arg Met Cys Ala Asp Ile Tyr Gly Arg
                                25
Ser Gly Gly Arg Leu Ser His Val Gln Lys Ser Phe Tyr Ile Leu Ala
                                                45
Val Asn Phe Asn Asn Ser Ala Phe Asn Ile Cys Gln Val Cys Thr Ile
                        55
Glu Met Lys Ser Ile Ile Ser Phe His Leu Gly Ile Tyr Ser Ala Ala
<210> 10420
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10420
Thr Ser Thr Ser Thr Phe Ser Asn Lys Asp Glu Ile Phe Val
                                    10
Arg Ile Ser Pro Val Leu Leu Phe Leu Ser Leu Thr Ile Glu Glu Val
            20
                                25.
Leu Thr Ser Asn Lys Phe Asp Ile Thr Tyr Val Phe Leu Thr Ser Trp
                            40
Phe Arg Ser Ala Ile Leu Phe Ile Gln Arg Arg Ser
   50
                        55
<210> 10421
<211> 210
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(161)
<400> 10421
Thr Thr Val Arg Ser Asn Met Glu Ala Ile Asn Asn Tyr Asn Ser Gly
                                    10
Leu Asn Arg His Gln Leu Gly Gly Phe Ile Pro Val Tyr Asp Gln Leu
Ala Gly Thr His Tyr Phe Leu Ile Asp Gly Asn Arg Leu Gly Phe Met
Phe Ile Cys Asn Pro Ser Pro Gly Val Phe Asp Asn Gln Gln Asp Val
                        55
Leu Ala Glu Met Phe Lys Met Asp Phe Pro Thr Asp Thr Val Cys Gln
                    70
                                        75
Ile Ser Leu Thr Ala Leu Pro Asp Leu Thr Leu Gln Leu Ser Ala Trp
                                    90
                85
Ser Ala Val Arg Gly Gly Arg Met Thr Gly Asn Asp Lys Leu Lys Ala
                                105
            100
                                                    110
Asp Leu Leu Asn Gly Tyr Gln Leu Asp Tyr Tyr Asp Arg Ser Met His
                            120
                                                125
```

Lys Pro Leu Lys Pro Asp His Asp Thr Leu Met Leu Arg Asp Phe Gln

135

```
Val Trp Ile Ser Leu Ser Ile Pro Leu Gln Phe Ala Phe Pro Thr Glu
                    150
                                        155
Xaa Glu His Ser Arg Ile Asp Ser Leu Tyr Ser Glu Leu Val Ser Lys
                                    170
Leu Ile Thr Ile Gly Leu His Pro Phe Lys Val Asp Ala Glu Asn Trp
                                185
Leu Tyr Cys Ile Asp Lys Val Val Asn Pro Ala Lys Glu Leu Pro Val
                            200
Gly
    210
<210> 10422
<211> 153
<212> PRT
<213> Enterobacter cloacae
<400> 10422
Thr Phe Pro Leu Gly Phe Ile Met Lys Thr Pro Asn Glu Ala Glu Ser
                                    10
Glu Leu Leu Gln Thr Leu Ala Gln Val Arg Ser Val Asn Lys Lys Arg
            20
                                25
His His Asp Glu Ala Glu Glu Pro Asp Lys Pro Ser Val Val Lys Arg
        35
Gln Arg Val Thr Gln Gly Leu Thr Arg Ile Ser Thr Leu Asp Arg Gln
                        55
Ala Val Leu His Ala Ala Ile Arg Asp Ile Leu Leu Gly Lys Ile Thr
                    70
Gln Gly Glu Ala Leu Lys Arg Leu Arg Val Glu Val Leu Gly Leu Lys
                                    90
Gln Asp Glu Tyr Ala Lys Leu Val Ser Val Ser Arg Lys Thr Leu Ser
            100
                                105
Asp Val Glu Asn Asn Arg Gly Asn Tyr Ser Ala Asp Val Ile Asn Lys
                            120
Ile Phe Lys Pro Phe Gly Leu Gln Thr Gly Leu Val Pro Val Ser Lys
                        135
Ser Leu Ile Ala Ser Leu Phe Ser
                    150
<210> 10423
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 10423
Tyr Ser His Asn Ser Asn Gln Pro Gly Trp Phe Asn Pro Ser Val Pro
                                    10
Val His Gln Val Ser Phe Phe Ser Val Arg Met Ser Ile Asp Gly Ala
Pro Gln Lys Glu Val Gly Val Thr Val Ile Leu Pro Glu Ile Pro Leu
                            40
Cys Ser Gly Cys Val Leu Ser Phe Arg Gln Asp Thr Trp Leu
<210> 10424
<211> 313
<212> PRT
<213> Enterobacter cloacae
<400> 10424
Val Met Thr Ile Glu Ser Phe Phe Ile Gly Thr Arg Met Ser Gly Lys
                                    10
```

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Arg Tyr Gly Pro Gln Ser Lys Asp Met Gln Val Ser Glu Phe Ile Ala
                                25
Leu Ile Ser Pro Lys Asn Glu Pro Glu Lys Phe Val Leu Pro Asp Phe
                            40
Ser Gly Leu Ala Arg Arg Ile Asp Ala Gln Ile Arg Asn Gln Phe Ile
                        55
Gln Gln Lys Glu Asp Asp Tyr Tyr Arg Arg Tyr Arg Gln Leu Ser Asp
                                        75
Arg Trp Tyr Gln Ala Gly Ser Ile Ser Asp Arg Asn Asn Arg Ser Gln
                85
                                    90
Arg Phe Glu Lys Val Met Asp Glu Ser Leu Glu Phe Leu Val Tyr Ser
                                105
            100
His Asp Val Met Pro Asn Ile Asn Pro Tyr Asn Leu Lys Tyr Asp Asp
                            120
                                                125
Arg Val Gln Val Ser Thr Lys Gly Lys Met Tyr Cys Val Ala Leu Leu
                                            140
                        135
Phe His Ile Ile Ala Arg Ala Ala Tyr Glu Pro Val Ser Val Gly Ala
                    150
                                        155
Asp Pro Thr Leu Gln Arg His Cys Lys Trp Leu Lys Asp Trp Ile Asn
                                    170
                165
Lys Thr Leu Gly Asp His Phe Leu Glu Gly Met Met Ile Thr Phe Ala
                                                    190
            180
                                185
Leu Cys Tyr Pro Asp His Phe Pro Ala Leu Gln Arg Leu Ser Gly Glu
                            200
       195
Leu Glu Thr Arg Asp Val Asp Thr Phe Leu Ala Asp Glu Val Arg Lys
                                            220
                        215
Ala Arg Gln His Thr Glu Glu Gln Val Asn Tyr His Asn Gly Arg Tyr
                    230
                                        235
Arg Leu Lys Phe Glu Tyr Thr His Phe His Gln Gln Ghe Asp Phe
                                    250
                245
Leu Ala Glu Met Arg Asp Leu His Tyr Arg Ile Asp Arg Ile Glu Gln
            260
                                265
Leu Leu Gln Lys Leu Ile Asp Asn Pro Val Val Asp Phe Ser Glu Ala
                            280
                                                285
Ala Val Ala Gly Gln Trp Ile Asp Glu Gln Val Gln Leu Leu Glu Thr
                        295
                                            300
Asn Glu Thr Lys Leu Ile Leu Pro
                    310
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<210> 10425

<211> 97

<212> PRT

<213> Enterobacter cloacae

<400> 10425

Ser Pro Leu Ser Arg Thr Pro Ala Pro Cys Gly Ala Glu Glu Cys Leu 10 Thr Leu Ile Glu Ser Ile Asn Val Asn Lys Arg Thr Leu Ser Ser Ser Ile Val Ser Asn Arg Asn Arg Gln Trp Leu Asp Ala Tyr Thr Gln 40 Ser Pro Glu Ile His Met Pro Phe Ser Asp Phe Leu Lys Ile Ile Gln 55 Lys Phe Gln Cys Ala Thr Val Leu Glu Lys Val Leu Met Leu Leu Phe 70 75 Val Ile Leu Ile Ile Val Gln Gln Val Ile Asp Thr Phe Cys Ser Arg

<211> 138

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<211> 199
<212> PRT
<213> Enterobacter cloacae
<400> 10426
Ser Arg Gly Ile Met Ala Arg Thr Tyr Val Lys Gln Thr Val Gln Asn
                                    10
Asn Glu Gln Leu Phe Asp Ser Leu Val Ile Asn Ala Ile Asp Phe Leu
                                25
Glu Ser Ser Ile Asp Asp Leu Asn Ile Arg Pro Lys Asn Ser Ile Val
                            40
Asp Phe Tyr Thr Ala Ile Glu Leu Phe Leu Lys Ala Arg Leu Met Leu
                        55
Glu His Trp Thr Leu Ile Leu Asp Asp Pro Ser Lys Ala Asn Lys Gln
                    70
                                        75
Lys Phe Ser Val Gly Asp Phe Asn Ser Val Tyr Phe Asn Asp Ala Val
                                    90
Gln Arg Leu Lys Thr Ile Ile Gly Ile Lys Leu Asp Asp Asn Ile Leu
                                105
Asp Glu Phe Arg Thr Leu Gly Ala His Arg Asn Gln Ile Val His Phe
                            120
Ala His Thr Gly Tyr Ser Ser Thr Gln Ala Asn Lys Ala Gly Val Val
                        135
                                            140
Ala Gln Gln Trp Ser Ser Trp His His Leu Tyr Asn Leu Leu Thr Val
                    150
                                        155
Glu Trp Lys Asp Glu Phe Ile Lys Phe Lys Glu Glu Phe Glu Arg Val
                                    170
                165
His Lys Arg Met Leu Gln Gln Lys Asp Phe Leu Ser Thr Arg Phe Asn
                                185
Glu Leu Ser Lys Gly Asp
        195
<210> 10427
<211> 151
<212> PRT
<213> Enterobacter cloacae
<400> 10427
Val Lys Thr Asn Arg Phe Ile Val Ser Thr Val Asp Cys Ile Asn Glu
Phe Ala Ser Asp Val Pro Gln Ser Val Ser Leu Arg Ile Asp Thr Met
            20
Leu Glu Gln Arg Ile Arg Lys Leu Ala Ala Tyr Val Lys Glu Asn Asp
                            40
Leu His Leu Thr Glu Phe Tyr Phe Tyr Asp Ala Asn Trp Ser Phe Cys
                        55
Gly Glu Asp Glu Ile Gln Glu Ile Lys Asp Met Asp Glu Tyr Lys His
Ser Asp Ser Ile Lys Gln Glu Ala Met Leu Arg Glu Val Met Pro Ser
Ala Arg Thr Glu Cys Pro Val Ile Arg Val Met Lys Asp Ser Phe Gln
                                105
Leu Ser Ala Leu Pro Arg His Cys Gly Asp Asp Met Thr Leu Asn Thr
                            120
Pro Phe Ile Pro Leu Ser Glu Leu Lys Thr Asn Asn Thr Ala Phe Ile
                        135
Thr Pro Pro Thr Tyr Asn
                    150
<210> 10428
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<212> PRT
<213> Enterobacter cloacae
<400> 10428
Cys Ser Ile Tyr Arg Gly Ser Gly Lys Tyr Met Phe Ile Glu Lys Ser
                                    10
Asp Ser Phe Leu Glu Leu Ser Ser Glu Val Ile Phe Pro Glu Ala Ala
            20
                                 25
Asn Ala Ala Ile Leu Lys His Asp Lys Trp Ala Asp Val Trp Glu Thr
                            40
Leu Thr Thr Asp Ala Asp Leu Asn Tyr Thr Asp Glu Lys Glu Thr Val
                        55
Ser Leu Ser Ser Leu Val Met Ser Ala Thr Ser Ala Ile Tyr Gln Ala
                    70
                                         75
Ile Thr Asp Gly Trp Thr Met Cys Val Gly Tyr Ser Gly Gly Lys Asp
                85
                                    90
Ser His Ser Leu Leu His Leu Phe Leu Met Ala Leu Ile Arg Ala Val
                                105
            100
                                                     110
Arg Asn Gly Thr Asn Ile Ser Glu His His Phe Ile Gln Met Ser Asp
        115
                            120
Thr Asn Tyr Tyr His Thr Val Thr Ala
   130
                        135
<210> 10429
<211> 74
<212> PRT
<213> Enterobacter cloacae
<400> 10429
Asp Ile Cys Gly Asp Leu Ile Ser Thr Leu Trp Thr Phe Ile Asp Ile
                                    10
                                                         1.5
Leu Thr Glu Lys Phe Glu Trp Tyr Phe Thr Leu Trp Ala Lys Gln Thr
            20
                                 25
                                                     30
Ile Gly Glu Leu Leu Tyr Arg Ile Ala Leu Ala Ile Pro Lys Gln Glu
        35
                            40
Ile His Lys Ser Ser Pro Pro Phe Met Ser Ile Ile Asn Phe Asn Arg
Leu Ser Thr Ala Pro Phe Asp Arg Thr
<210> 10430
<211> 76
<212> PRT
<213> Enterobacter cloacae
<400> 10430
Ala Lys Pro Leu Ala Arg Ser Leu Ser Val Arg Phe Ala Lys Thr Ser
Tyr Gln Tyr Leu Met Ala Val Gly Asn Leu Arg Asp Ala Tyr Ala Ile
                                25
Arg Pro Asn Arg Leu Glu Asn His Leu Ile Ala Glu Ile Ser His Pro
                            40
Leu Phe Ala Asp Asp Val Leu Leu Phe Phe Leu Phe Val Phe Ala Ile
                        55
Leu His His Leu Ile Gln Val Leu Ile Cys Glu
<210> 10431
<211> 310
<212> PRT
<213> Enterobacter cloacae
```

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<400> 10431
His Asp Trp Phe Ile Gly Thr Ile Tyr Ser Pro Tyr Val Met Asn Ile
                                    10
Phe Leu Pro Gln His Leu Asp Ile Ala Asn Pro Tyr Val Lys Ile Gln
            20
                                25
Lys Lys Ser Glu Gln Asp Arg Glu Met Glu Ser Lys Asn Ser Ser Phe
                            40
Tyr Phe Asp Arg Val Asp Phe Leu Ser Lys Ser Ile Ser Tyr Ser Thr
                        55
Leu Met Ile Ser Cys Leu Ser Ile Val Gly Ile Phe Leu Asn Ser His
                    70
                                        75
Trp Leu Tyr Gly Ile Ala Thr Leu Thr Phe Ile Ile Gln Leu Leu Thr
                                    90
Trp Phe Ala Met His Phe Lys Thr Ser Tyr Ala Ala Lys Ala Ile Glu
                                105
Thr Lys Arg Leu Glu Met Leu Arg Gly Ile Ile Gly Glu Glu Asn Phe
                            120
Tyr Arg Glu Arg Leu Tyr Ile Asp Gly Asn Ala Glu Asn Lys Asn Gly
                        135
                                            140
Phe Arg Ala Glu Arg Leu Ile Thr Leu Ile Gln Glu Asn Ala Tyr Trp
                    150
                                        155
Asn Ser Ile Leu Tyr Ile Lys Ala Phe Gln Gln Lys Leu Phe Tyr Leu
                165
                                    170
Leu Leu Thr Ile Leu Leu Ile Thr Ile Ile Ile Met Tyr Thr
            180
                                185
Thr Leu Thr Asp Asn Leu Asp Phe Gln Tyr Ser Arg Ala Ile Phe Gly
                            200
                                                205
Ile Leu Val Ile Asn Asn Phe Tyr Asn Leu Phe Ser Glu Val Ser Gly
                        215
                                            220
Phe Leu Asn Ala His Asn Glu Met Lys Lys Ile Asp Ser Phe Ile Glu
                    230
                                        235
Ile Asn Asn Arg Lys Ala Pro Glu Tyr Leu Ser Tyr Ile Tyr Ser Lys
                245
                                    250
Tyr Glu His Glu Ile Phe Ile Ala Pro Ser Ile Asn Asn Ala Ile Tyr
            260
                                265
Leu Lys His Ser Met Gln Ile Lys Gln Thr Trp Ala Gln Arg Leu Tyr
                            280
Asn Lys Asn Asn Phe Gln Ser Lys Gln Leu Ile Asp Ala Ile Thr Glu
    290
                        295
                                            300
Phe Thr Leu Val Arg Pro
                    310
<210> 10432
<211> 264
<212> PRT
<213> Enterobacter cloacae
<400> 10432
Pro Pro Leu Arg Ala Pro Leu Pro Leu Val Ala Gly Val Glu Asn Gln
                                    10
Arg Leu Ile Ala His Pro Ser Gly Ser Gly Leu Phe Ala Asp Val Leu
                                25
Thr Leu Lys Thr His Ser Ser Gly Asp Glu Val Ile Ser Arg Tyr Thr
                            40
Val Gln Lys Asp Tyr Asn Pro Gln Glu Gly Gly Asn Tyr Phe Leu
                        55
Ile Lys Ala Ala Cys Ala Ala Arg Asp Tyr Pro Ala Leu Ala Asn Asp
                                        75
                    70
```

Ile Tyr Phe Thr Val Val Asn Trp Asp Leu Leu His Arg Ser Asn Leu

```
Val Leu Ala Glu Leu Leu Lys Thr Val Asn Leu Ser Ala Lys Asn Ser
            100
                                105
Ser Gly Phe Lys Val Pro Glu Ser Trp Gln Val Asn Pro Leu Thr Glu
                            120
                                                125
Thr Arg Leu Val Val Glu His Ser Phe Asp Gly Ile Asn Tyr Gly Val
                        135
                                            140
Ile Asn Leu Cys Phe Phe Ser Gln Glu Met Leu Phe Thr Ala Gln Asp
                    150
                                        155
Val Phe Ser Val Ser Ile Lys Arg Phe His Asp Arg Glu Pro Ala Val
                                    170
Thr Leu Lys Thr Glu Ala Leu Ala Thr Ile Pro Asn Glu Phe Asn Pro
                                185
Ser Leu Gly Lys Thr Leu Trp Thr Cys Arg Gly Glu Met Phe Ser Ala
                            200
                                                 205
Glu Glu Glu Met Arg Ala Val Tyr Gln Cys Tyr Ile Phe Ser Val Gly
                        215
                                             220
Lys Val Trp Cys Tyr Ala Glu Leu Ile Gly Arg His Arg Asn Tyr His
                    230
                                         235
Asp Tyr His Phe Glu Ala Asn Lys Arg Cys Leu Glu Ile Ile Leu Ser
                                    250
                245
Thr Phe His Ile Glu Asn Val
            260
<210> 10433
<211> 133
<212> PRT
<213> Enterobacter cloacae
<400> 10433
Leu Thr Glu Ser Thr Ala Met Asn Glu Met Thr Met Phe Gly Tyr Val
                                    10
                                                         15
Asp Arg Ala Leu Thr Leu Ala Gln Lys Arg Tyr Ala Asp Val Lys Asn
            20
                                25
Arg Asp Pro Gln Ser Pro Leu Leu Gln Met Tyr Asp Ser Ile Val Gln
        35
                            40
Gln Leu Leu Phe Leu Arg Asp Leu Ile Glu Gly Lys Glu Lys Asp Arg
                        55
                                            60
Ala Lys Leu Trp Asp Met Thr Phe Gly Met Tyr Ala Gly Lys Glu Phe
                    70
                                         75
Asp His Ser Asp Glu Leu Phe Phe Glu Arg Leu Ser Asp Ala Trp Phe
                85
                                    90
Ile Val Asp Gln Ile Arg Arg Gly Leu Lys Val Arg Leu Pro His Glu
                                105
Val Asp Thr Asn Tyr Asn Lys Lys Lys Gln Asn Leu Met Lys Lys Phe
                            120
Pro Asp Glu Phe
    130
<210> 10434
<211> 84
<212> PRT
<213> Enterobacter cloacae
<400> 10434
Phe Ser Glu Val Ser Tyr Ser Thr His Gly Ile Arg Tyr Gln Glu His
                                    10
Ile Asn Ala Ser Lys Asn Asp Ala Cys Asn Asn Ser Lys Ser Tyr Lys
           20
                                25
Arg Pro Glu Ile Ser Gln Val Ile Gly Phe Met Ser Asp Thr Ala Tyr
                            40
```

Ser Ile Tyr Leu Lys Lys Trp Gln Ser Lys Tyr Tyr His Gln Ile Gln

55 60 Ile Lys Lys Lys Thr Asn Asn Asn His Asn Gln Val Val His Asn Ile 75 70 Thr Ser Leu <210> 10435 <211> 135 <212> PRT <213> Enterobacter cloacae <400> 10435 Cys Val Lys Gln Leu Lys Thr Leu Asn Gly Arg Thr Gly Glu Val Thr 10 Lys Met Thr Thr Asn Thr Thr Thr Thr Tyr Arg Ser Glu Glu Ile 25 Val Pro Phe Arg Arg Pro Lys Gly Asp Leu Asp Ser Arg Tyr Met Pro 40 Gln Val Tyr Ala Met Val Arg Asn Trp Ala Ser Asn Pro Ala Gln Tyr 55 Gly Glu Gly Val Leu Ala Ser Tyr Arg Gln Pro Ala Val Asn Leu Ala 70 75 Tyr Gln Val Lys Gly Thr Arg Val Val Leu Ile Leu Val Pro Val Glu 85 90 Cys Glu Pro Pro Gly Val Ile Met Thr Glu Thr Val Leu Trp Pro Ser 105 110 100 Leu Ser Leu Val Glu Val Leu Gln Thr Leu Gln Glu Ala Trp Gln Asn 115 120 Ile Pro Ala Leu Asn Pro 135 130 <210> 10436 · <211> 102 <212> PRT <213> Enterobacter cloacae <400> 10436 Ser His Thr Lys Glu Gly Ile Met Asn Thr Phe Leu Tyr Val Leu Leu 10 Ala Trp Ile Val Val Leu Phe Ile Ala Asn Lys Leu Leu Ala Arg Arg 20 Lys Pro Asn Thr Val Lys Ile Leu Val Gln Arg Asn Gly Lys Ala Ala 45 Glu Val Asp Ala Val Val Gln Gly Ser Lys Arg Ala Asn Asn Ser Ser Val Ala Asp Ser Asp Ala Val Asp Ser Tyr Phe Glu Met Asn Pro 70 75 Tyr Ser Arg Glu Asn Gln Ala Asn Gly Trp Ala Met Leu Ala Arg Asp Asp Asp Gln Leu Lys 100 <210> 10437 <211> 103 <212> PRT <213> Enterobacter cloacae <400> 10437 Pro Phe Arg Leu Asp Ala Ile Lys Leu Thr Thr Ser Val Tyr Asp Asp 10 Asp Ile Asp Thr Phe Gln Phe Ser Ser Leu Lys Ser Arg Leu Asn Ser

```
20
                                25
Pro Asp Val Pro Leu Val Leu Leu Lys Arg Val Leu Gln Leu Glu Gly
                            40
                                                45
Ser Gly Leu Ser Pro Phe Pro Pro Val Ala Phe Leu Gln Ser Thr Val
                        55
                                            60
Glu Leu Ala Tyr Val Val Phe Leu Leu Tyr Asp Val Tyr Thr Met Trp
                    70
                                        75
Gly Tyr Glu Asn Val Ile Asn Leu Arg Ser Ala Met Ser Arg Gln Leu
               85
Lys Gly Glu Ile Thr Lys
            100
<210> 10438
<211> 74
<212> PRT
<213> Enterobacter cloacae
<400> 10438
Thr Gly Trp Ile Cys Gly Val Cys Cys Ala Val Glu Val Pro Ile Leu
Gly Gly Val Ile Asn Ile Pro Leu Asp Val Leu Pro Glu Pro Leu
            20
                                25
Val Pro Leu Thr Glu Leu Thr Gly Ala Gly Ala Leu Phe Glu Leu Val
                            40
Gln Pro Ala Ser Gln Ser Glu Thr Ser Asp Asn Ala Ala Thr Arg Leu
                        55
His Arg Arg Gly Arg Gln Glu Pro Gln
<210> 10439
<211> 187
<212> PRT
<213> Enterobacter cloacae
<400> 10439
Leu Met Arg Phe Leu Asn Pro Gln Trp Arg Lys Pro Cys Thr Leu Leu
                                    10
Val Gly Lys Val Arg Leu Leu Lys Arg Leu Ala Leu Arg Lys Glu Leu
                                                    30
Ser Gly Ser Gly Gly Ser Arg Lys Phe Leu Arg Ser Met Gln
Trp Gln Ser Gln Thr Gln Leu Met Glu Leu Leu Ser Leu Met Asn Cys
Val Leu Ile Cys Arg Leu Phe Ser Leu Thr Arg Ala Met Arg Cys Asp
                                        75
Met Ser Arg His Ala Gly Gly Ile Met Asn His Ser Asp Phe Val Arg
Lys Tyr Ser Phe Asp Asn Pro Leu Gln Arg Leu Val Met Leu Arg Ile
                                105
                                                    110
Leu Met Gly Gly Ser Met Asp Gly Glu Gly Glu Arg Val Ile Asp His
                            120
                                                125
Gln Val Leu Tyr Glu Phe Cys Cys Cys Ser Lys Gln Ala Met Phe Lys
                        135
                                            140
Glu Ile Lys Ala Leu Glu Arg Ala Gly Phe Leu Lys Val Arg Lys Ile
                    150
                                       155
Gly Ala Leu Asp Thr Gly Leu Ala Val Arg Leu Glu Pro Ala Arg Gly
               165
                                    170
Tyr Thr Ile Thr Pro Val Gln Glu Phe Val
```

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<211> 70
<212> PRT
<213> Enterobacter cloacae
<400> 10440
Ser Pro Asn Cys Leu Phe Ser Ile Asn Lys Gly Asn Leu Arg Asn Thr
Leu Arg Ile Ser Ala Ser Ile Ile Asn Lys Phe Asn Tyr His Ser Tyr
            20
                                25
Cys Glu Trp Ile Arg Ser Lys Ser Val Glu Pro Thr Asn Leu Pro Ala
                            40
Lys Arg Leu Asn Glu Thr Ser Gly Glu Asp Lys Pro Gln Ile Phe Pro
                        55
Asp Val Phe Thr His
<210> 10441
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 10441
Asn Ser Gly Ser Gly Ser Ser Asn Glu Asp Leu Cys Pro Val Ile Ile
Val Thr Lys Tyr Arg Ile Lys Pro Ser Leu Ser Leu Ala Asn Asp Glu
            20
                                25
Asn Leu Phe Tyr His Ser Lys Asn Gln Gly Gly Leu Ile Arg Pro Glu
                            40
Arg Phe Gln Val Thr Leu Ser Ser Gly Cys Thr Asn His Pro Pro Thr
   50
                        55
Phe Thr
<210> 10442
<211> 118
<212> PRT
<213> Enterobacter cloacae
<400> 10442
His Thr Pro Arg Asn Lys Met Asn Ile Glu Val Leu Arg Tyr Leu Glu
                                    10
Ser Asp Gly Arg Glu His Val Glu Glu Lys Val Gln Pro Thr Lys Tyr
Asp Ser Glu Ala Thr Phe Ala Val Ile Lys Ile Leu Ile Ala Asn Asp
Gly Asn Ala Asp Ala Leu Ser Asp Lys Gln Lys Phe His Leu Lys Thr
Phe Val Glu Pro Leu Ile Asn Arg Val Pro Cys Ser Gly Ile Tyr Gly
                                        75
Glu Asp Thr Cys Thr Gly Asp Gly Phe Val Asp Asp Glu Ser Leu Leu
Met Ser Tyr Gln Glu Asp Asp Phe Met Cys Gln His Cys Arg Tyr Asp
            100
                                105
Ala Glu Asn Arg His
        115
<210> 10443
<211> 133
<212> PRT
<213> Enterobacter cloacae
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5810
<400> 10443
Lys Gly Gly Met Ser Arg Lys Ser Thr Tyr Lys Thr Lys Ala Glu
                                    10
Asn Glu His Leu Ala Arg Val Ala Ala Leu Gly Cys Ile Val Cys Lys
            20
                                25
Asn Ile Gly His Glu Asp Thr Pro Ala Glu Ile His His Cys Ser Lys
                            40
Gly Thr Gly Leu Ala Val Arg Ala Asp Asn Phe His Val Ile Pro Leu
                        55
Cys Ala Ile His His Arg Gln Gly Gly His Gly Val Ala Ile His Ala
                    70
                                        75
Gly Arg Asn Thr Trp Val Gln Lys Tyr Gly Thr Glu Ala Glu Leu Leu
                                    90
Ala Gln Val Asn Ala Glu Leu Gly Ile Ala Ala Trp His Ser Ile Gln
                                105
Ser Ile Ser Ser His Tyr Asn Leu Asn Gly Ala Ala Ser Leu Leu Lys
                            120
Glu Glu Asn Lys
   130
<210> 10444
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 10444
Ala Asn Leu Asn Tyr Ser Asp Val Ser Asn Asp Asn Thr Leu Cys Lys
Tyr Thr Val Trp Trp Phe Leu Thr Gly Asp Ile Met His Ile Ser Asp
                                25
Asp Val Ile Pro Gly Ala Ala Gly His Thr Gly Pro Val Leu Val Tyr
                            40
Leu Glu Cys Gly Arg Ile Ser Gly Gly Phe Val Leu Gln Pro Asp Glu
Phe Val Thr Ser Leu Ala Ala Leu Asp Glu Ala Arg Gln His Ala Gly
                    70
Leu Thr Pro Cys Ser Phe Ser His Pro Val Ser Asp Leu
```

<210> 10445 <211> 89 <212> PRT <213> Enterobacter cloacae

85

<210> 10446 <211> 96 <212> PRT

## <213> Enterobacter cloacae

<210> 10447

<211> 83

<212> PRT

<213> Enterobacter cloacae

<400> 10447

 Arg His Ile Pro Ala Cys Arg Ser Ala Asp Thr Ser Ala Arg Ala Phe

 1
 5
 10
 15

 Phe Gly His His Ile Thr Gly Gln Glu Ile Leu Ser Gly Arg Gly Val
 20
 25
 30

 Thr Glu Gln Gln Leu Gly His Cys His Pro Leu Ala Asp Leu Thr Pro
 35
 40
 45

 Leu Ile Ala Lys Leu Ala Phe Ser Pro Asp Ser Val Leu Pro Ser Trp
 50
 55
 60

 Ala Gly Leu Leu Thr Leu Ala Pro Leu Ile Arg Asn Ala Pro Ala Asp

Lys Asp

<210> 10448

<211> 192

<212> PRT

<213> Enterobacter cloacae

<400> 10448

Arg Glu Tyr Tyr Arg Tyr Gly Asp Ala Arg Arg Phe Thr Ser Glu Ser Ile Leu Met Asn Phe Gln Thr Asn Glu Val Phe Asn Lys Phe Ala Ala Val Ile Lys Ser Arg Ile Val Asn Glu Pro Ser Ser Cys Tyr Leu Leu His Asp Asn Glu Ile Asp Ile Thr Ile Leu Lys His Gly Ile Leu Glu Asn Asp Arg Asn Leu Leu Tyr Val Val Arg Pro Ser Gly Thr Cys Leu 75 Leu Arg Cys Asp Lys Tyr Phe Tyr Pro Lys Tyr Tyr Leu Arg Cys Arg 85 90 Gly Asp Tyr Lys Ser Phe Ile Tyr Val His Leu Asp Leu His Ser Gly 105 100 Glu Ala Lys Glu Ile Thr Trp Glu Gln Ala Asp Asp Met Leu Ser Ser 120 125 Pro Gly Lys Pro Pro Leu Lys Gly Asn Leu Gly Arg Phe Glu Tyr Ile 135 140 Lys Val Val Glu Asp Leu Arg Ile Arg Gly Tyr Ala Asp Tyr Leu 155

Pro Ala Tyr Asn Leu Asp Asp Leu Arg Arg Phe Ala Leu Gln Asp Asp 170 165 Arg Pro Ser Leu Val Arg Tyr Ile Asp Asn Val Met Ala Thr Val 185 180 <210> 10449 <211> 308 <212> PRT <213> Enterobacter cloacae <400> 10449 Trp Pro Thr Cys Ile Arg Glu Ala Ser Ile Thr Thr Gly Gly Cys Met Lys Leu Ala Thr Asp Leu Val Lys Ala Ile Leu Ile Arg Asn Gly Val 20 Glu Pro Val Asn Ile Ser Glu Ser Ser Lys Leu Ser Leu Lys Gln Pro 40 Leu Thr Glu Leu Lys Phe Ser Leu Tyr Leu Arg Thr Glu His Leu Ser 55 His Phe Leu Pro Gly Tyr Val Tyr Ser Ile Lys Glu Cys Pro Leu Ser 70 75 Tyr Asp Ile Gly Ile Glu Ile Gln Lys Ile Phe Glu Ser Leu His Leu 90 85 Leu Asn Glu Glu Phe Glu Ser Leu Gly Phe Val Ser Val Trp Ile Glu 110 105 100 Met His Gln Ser Ile Phe Glu Gln Ser Arg Phe Lys Lys Ser Asn Phe 120 125 Thr Phe Arg Glu Glu Glu Val Glu Leu Ala Lys Gly Leu Val Cys Ser 135 140 His Asn Ser Gln Ile Ser Asn Ala Ala Tyr Phe Trp Leu Gln His Phe 155 150 Glu Glu Phe Met Ile Tyr Val Arg Asn Lys Leu Ile Asp Leu Phe Arg 165 170 Glu Ala Tyr Asp Leu Ile Leu Gly Met Gln Gln Val Phe Phe Ile Arg 180 185 190 Glu Lys Glu Glu Leu Leu Lys Thr Ile Ser Tyr Gly Asp Asp Leu Tyr 195 200 205 Glu Val Lys Leu Met Ala Ala Glu Leu Tyr Ser Ile Glu Gln Asn Leu 215 220 Lys Cys Ser Glu Ser Ile Ser Thr Lys Ser Gln Ala Ser Ala Tyr Ile 230 235 Asn Arg Ile Arg Glu Phe Val Arg Ser Gly Trp Arg Gln Gly Tyr Ile 245 250 Val Cys His His Lys Arg Ser Asn Gln Ile Ser Ser Leu Ser Leu Pro 265 Met Tyr Leu Lys Asp Thr Ser Gly Arg Ser Ala Arg Lys Arg Val Lys 280 Arg Leu Ile Ser Ser Thr Val Cys Gly Arg Asn Lys Asp Leu Gly Leu 290 295 Thr Asp Phe 305 <210> 10450 <211> 451 <212> PRT <213> Enterobacter cloacae <400> 10450 Ser Ile Asn Val Glu Gly Pro Arg Ala Leu Phe Leu Lys Phe Cys Val

10

Val Gly Phe Ser Leu Ser Ser Ala Pro Gln Lys Ala Leu Arg Asn Ser

```
20
                                25
Gln Cys Gln Ile Arg Glu Ile Ile Met Thr Tyr Ala Ser Pro Ala Leu
                            40
                                                 45
Arg Arg Lys Pro Gln Glu Val Ser Glu His Phe Ile Lys Leu Val His
                        55
                                            60
Ala Arg Ile Ala Glu Val Ser Gly Trp Lys Tyr Ile Phe Glu Arg Ile
                    70
                                        75
Pro Ala Phe Lys Asp Ala Cys Ala Lys Ala Pro Ser Gln Val Pro Cys
                85
                                    90
Pro Phe Thr Gly Ala Gly Lys Ser Lys Phe Arg Phe Arg Gln Lys Asp
                                105
Leu Tyr Thr Gly Cys Ala Ile His Asn Asp Phe Pro Val Asn Glu Phe
                            120
Cys Asp Gly Ile Asp Val Leu Ala Lys Tyr Tyr Glu Leu Ser Lys Thr
                        135
                                            140
Gln Thr Cys Lys Lys Ile Leu Ser Asp Phe Phe Gly Met Asp Leu His
                    150
                                        155
Ala Pro Leu Thr Asp Ala Asp Ile Glu Asn Glu Arg Arg Tyr Lys Ser
                                    170
                165
Ala Val Arg Ala Thr Glu Thr Leu Asp Arg Glu Glu Val Ala Lys Arg
                                185
            180
Met Arg Lys Leu Asp Val Met Tyr His Tyr Thr Gly Glu Ile Lys Pro
                            200
                                                 205
       195
Asn Thr Pro Val Ala Leu Tyr Leu Arg Asn Arg Gly Ile Ser Arg Leu
                        215
                                            220
Leu Ser His Leu Pro Lys Asp Leu Gly Phe Asn Asn Arg Ile Tyr Tyr
                    230
                                        235
Trp Asp Lys Asp Lys Gln Lys Ser Ile Ile Tyr Pro Gly Met Ile Ala
                                    250
                245
Ile Tyr Arg Asp Thr Arg Gly Arg Pro Leu Thr Ile His Arg Thr Tyr
            260
                                265
Val Asp Lys Asn Gly Asp Lys Ala Pro Val Glu Asn Pro Lys Leu Met
        275
                            280
Met Lys Pro Pro Ala Asp Met Thr Gly Gly Ser Ile Gln Leu Phe Asp
                        295
                                             300
   290
Pro His Tyr Asp Ser Gly Ser Ser Thr Trp Thr Leu Gly Val Ala Glu
                    310
                                         315
Gly Ile Glu Asn Ala Leu Ser Val Val Glu Ala Thr Ser Thr Pro Cys
                325
                                    330
Trp Ala Ala Ser Ser Ala Trp Cys Leu Glu Asn Val Thr Val Pro Asp
            340
                                345
Phe Leu Leu Pro Pro Pro Asp Val Lys Tyr Ile Asn Phe Tyr Ile Trp
                            360
Ala Asp Lys Asp Ile Ala Asn Ser Gln Gly Thr Arg Ala Gly Ile Glu
                        375
                                             380
Ala Ala Gln Arg Leu Gln Ser Arg Met Val Glu Phe Leu Ala Lys Arg
                    390
                                         395
Tyr Pro Ala Ser Lys Leu Thr Ile Glu Val Phe Glu Pro Ala Gln Asp
                                    410
Ile Pro Asp Gly Lys Lys Gly Ile Asp Trp Asn Asp Val Leu Gln Leu
            420
                                425
Thr Gly Gln Asp Gly Phe Pro Ile His Trp Ala Pro Glu Cys Leu Asn
                            440
Gln Leu
   450
<210> 10451
<211> 115
<212> PRT
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<213> Enterobacter cloacae

```
<400> 10451
Ser Leu Phe Leu Leu Arg Glu Asp His Met Lys Ile Ile Glu Lys Ile
                                    10
Ile Asn Ala Phe Leu Val Val Gln His Lys Lys Ile Gln Val Lys Asn
                                25
Ile Thr Phe Leu Asp Asn Gly Gln Gly Met Phe Ser Gly Met Ser Phe
                            40
                                                 45
Asp Ala Asp Val Ser Leu Glu Phe Met Tyr Glu Ser Ala Lys Ala Tyr
                        55
Ser Ser Cys Phe Cys Asp Ile Pro Phe Pro Gly Phe Glu Asp Ala Asn
                    70
                                        75
Leu Glu Glu Ile Thr Lys Phe Gln Leu Asp Ala Leu Lys Gln Arg Lys
                                    90
Asn His Leu Val Pro Leu Leu Ser Ser Ser Gly Arg Ala Arg Ser Ile
Lys Thr Pro
        115
<210> 10452
<211> 109
<212> PRT
<213> Enterobacter cloacae
<400> 10452
Asp Lys Cys Ser Val Arg Lys Tyr Lys Leu Asn Leu Ser Ser Val Ser
                                    10
Gly Cys Phe Lys Asp Asn Leu Asp Asp Ser Leu Ile Phe Thr Gly Ser
            20
                                25
Thr Pro Phe Leu Ile Lys Ile Ala Phe Thr Arg Ser Val Ala Asn Phe
Ile Gln Pro Pro Val Val Ile Glu Ala Ser Leu Met Gln Val Gly His
                        55
Gln Gly Lys Tyr Val Asn Gln Leu Ala Thr Asn Gln Thr Val Ala Ile
                    70
                                        75
Thr Leu Ser Met Tyr Leu Thr Arg Asp Gly Arg Ser Ser Cys Lys Ala
                85
                                    90
Lys Arg Arg Arg Ser Ser Arg Leu Tyr Ala Gly Arg
            100
                                105
<210> 10453
<211> 188
<212> PRT
<213> Enterobacter cloacae
<400> 10453
Arg Ser Ser Asp Ser Arg Leu Arg Glu Cys Lys Ile Gly Tyr Tyr Met
                                    10
Asn Ile Asn Lys Asp Asp Glu Leu Leu Val Ile Val Lys Tyr Glu Gly
Arg Phe Tyr Trp Phe Val Ala Phe Lys Glu Met Trp Val Leu Asp Arg
                            40
Val Lys Trp Val Glu Asp Phe Val Lys Ser Gly Val Glu Ile Asn Leu
Gln Asn Thr His Lys Glu Arg Tyr Asp Ile Pro Val Val Asn Glu Glu
                    70
                                        75
Asn Ala Gln Ile Phe Ile Asp Gly Leu Ile Asn Asp Gly Tyr Ser Tyr
                85
                                    90
Asp Lys Asp Asp Ile Ala Glu Glu Phe Tyr Lys Arg Leu Ser Gln Lys
           100
                                105
Thr Ile Trp Trp Asp Ile Tyr Glu Leu Met Pro Asp Leu Phe Ile Asp
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120

Phe Asp Asn Lys Arg Leu Tyr Ser Glu Tyr Val Glu Ser Met His Tyr 135 140 Gln Glu Tyr Val Pro Asp Gly Trp Gln Gly Glu Leu Val Asp Phe Cys 150 155 Ser Asn Gly Ser Leu Pro Gln Asp Glu Met Phe Trp Ile Lys Asn Glu 165 170 Thr Asp His Arg Ser Val Leu Ile Ala Lys Gly 180 <210> 10454 <211> 114 <212> PRT <213> Enterobacter cloacae <400> 10454 Val Val Phe Asp Pro Leu Pro Glu Asp Ala Phe Gly Ala Asn Val Asn Ile Lys Ile Asp Lys Val Phe Lys Leu Asp Gln Asn Ala Gln Arg Cys 20 Ile Val Val Pro Phe Phe Ile Thr Asp Lys Asn Lys Ile Gln Ile Ala 35 40 Ser Ala Thr Glu Lys Phe Asp Val Ser Ile Asn Val Thr Gly Lys Ile 55 Tyr Ser Leu Phe Tyr Glu Val Cys Glu Gly Asp Glu Ile Tyr Tyr Asn 70 65 75 Phe Thr Leu Val Pro Glu Lys Glu Ala Ile Thr Ala Lys Phe Leu Leu 85 90 Asp Asp Pro Trp Gly Gly Lys Lys Tyr Asn Pro Leu Lys Glu Gly Phe 105 100 Phe <210> 10455 <211> 66 <212> PRT <213> Enterobacter cloacae <400> 10455 Thr Ala Thr Ser Thr Glu Pro Leu Pro Leu Glu Asp Ser Ala Glu Lys 10 Val Thr His Asn Arg Leu Thr Gln Leu Asn Val Ile Arg Trp His Tyr 25 Cys Tyr Asp Gly Glu His His Leu Thr Glu Val Ile Ser Gln Leu Arg 40 Asp Arg Asn Arg Pro Arg Thr Gln Val Ser Phe Arg Tyr Pro His Thr 55 Leu 65 <210> 10456 <211> 90 <212> PRT <213> Enterobacter cloacae <400> 10456 Gln Tyr Thr Ile Asp Gln Gly Asn Glu Phe His Asp Asn Gln Lys Tyr 10 Ala Glu Ala Leu Glu Gln Asn Gln Lys Ala Trp Gln Ala Leu Pro Glu 25 Pro Lys Leu Glu Trp Glu Leu Ala Asn Trp Ile Ala Ala Cys Met Tyr

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Ser Ala Cys Phe Asp Leu Ala Asp Tyr Ala Glu Glu Asn Lys Trp Gly
                        55
Lys Thr Thr Leu Arg Thr Arg Gly Ser Asp Ile Asp Thr Ala Pro Leu
                                        75
                    70
Ile Asp Leu Gly Met Val Cys Tyr Glu
                85
<210> 10457
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 10457
Arg Ile Lys Tyr Ile Phe Gly Lys Pro Phe Leu Asp Ile Ala Met Val
                                    10
Asp Ser Thr Arg Gln Phe Val Phe Val Leu Ser Glu Thr Lys Pro Leu
            20
                                25
Pro Ile Val Leu Thr Ile Phe Asn Ala Gln Gly Glu Lys Leu Phe Trp
                            40
                                                 45
Ser Thr Ser Pro Glu Ser Ala Ile Phe Tyr Tyr Leu Thr Leu Asn Gln
                        55
Ser Lys Glu Val Val Val Cys Asn Phe Thr Val Ile Gln Asn Gly
Trp His Asn Trp Phe Tyr Ser Trp Asp Met Lys Arg Asn Ala Leu Ser
                                    90
Arg Ser Gly Pro Ser Tyr
            100
<210> 10458
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Thr Cys Tyr Tyr Asn Ser Gly Val Lys Ala Met Thr Asp Glu Glu Leu
Arg Lys Asn Leu Val Phe Leu Ile Lys Lys Tyr Val Pro Glu Ser Gln
            20
Gln Lys Ala Phe Tyr Asp Asp Ile Ser Lys Ser Thr Val Pro Val Lys
Gly Ile Leu Ala Asp Phe Asn Lys Ile Lys Thr Arg Thr Val Asp Glu
Val Asp Gly Asp Leu Ile Arg Asp Ile Tyr Phe Tyr Phe Cys .
<210> 10459
<211> 166
<212> PRT
<213> Enterobacter cloacae
<400> 10459
Gln Ile Gln Gln Glu Gln Leu Asn Gln Glu Lys Lys Ala Lys Glu Ala
                                    10
Lys Ala Glu Glu Thr Asp Arg Pro Ser Ser Ile Thr Ile Ser Thr Ala
                                25
Asn Ser Gly Glu Gly Lys Glu Asn Lys Glu Asn Ala Glu Thr Gly Ser
                            40
Gly Lys Glu Pro Glu His Thr Glu Arg Asn Lys Asp Thr Asn Lys Thr
Thr Lys Ala Gln Gly Lys Gly Lys Gly Lys Thr Asn Ser Ala Gly Tyr
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Asn Gln Arg Thr Ala Pro Gly Glu Thr Glu Arg Ala Pro Gln Arg Ala
                85
                                     90
Glu Arg His Gly Lys Asn Gln Arg Glu Ala Ala Ser Arg Thr Gly Gly
            100
                                105
Glu Thr Glu Lys Pro Lys Glu Glu Glu Arg Thr Gly Ala Arg Arg Pro
                            120
Arg Pro Glu Arg Pro Arg Ser Gly Pro Ala Lys Thr Pro Lys Pro Gly
                        135
Gly Gly Ala Gln Ser Thr Glu Ile Thr Gln Ile Lys Thr Ala Gly Leu
                    150
                                         155
Ala Gly Asn Ala Ile Pro
                165
<210> 10460
<211> 67
<212> PRT
<213> Enterobacter cloacae
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Ser Pro Gly Arg Cys Glu Thr Trp Ser Ser Val Phe Ser Ala Thr Arg
                                    10
Gly Trp Cys Pro Lys Ile Gln Thr Ala Glu Val Leu His Ala Lys Trp
            20
                                25
Pro Glu Leu Val Leu Arg Leu Cys Pro Val Lys Leu Ala Asp Ser Asn
                            40
Gly Val Phe Gly Lys Asn Lys Cys Asp Ser Thr Ile Pro Lys Gly Phe
    50
                        55
Arg Gly
65
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<212> PRT
<213> Enterobacter cloacae
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Ile Cys Pro Arg Thr Tyr Arg Arg Asn Phe Asn Thr Arg Lys Val Xaa
Thr Ser Phe Pro Leu Ala Glu Lys Lys Ala Arg Thr Val Gln Val Arg
Ala Phe Phe Cys Phe Ser Cys Thr Arg Gln Pro Ala Ser Leu Pro Val
Val Met Met Met Val Val Wal Met Val Met Leu Met Arg Phe Met
                        55
Asp Val Val Tyr Ser Val Ile Ile Ile Cys Leu Cys Ser Ile Leu Leu
                    70
Gly Leu Lys Asp Arg Ala Pro
                85
<210> 10462
<211> 230
<212> PRT
<213> Enterobacter cloacae
<400> 10462
Arg Val Gly Pro Arg Ser His Pro Ala Gly Gly His Met Ser Glu Pro
                                    10
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195

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Arg Ser Asn Ala Gln Met Phe Asp Ile Asp Met Ser Ala Leu Arg Glu
            20
                                25
Leu Arg Glu Ala Val Gly Ala Thr Gln Gln Met Leu Met Ala Tyr
                            40
Asn Arg Ala Leu Asn Arg Thr Ala Lys His Met His Arg Val Ser Val
                        55
Gly Met Met Ile Asp Ala Leu Ala Val Lys Lys Arg Lys Val Ala Asn
                    70
                                        75
Lys Arg Ile Lys Pro Phe Val Lys Arg Arg Asn Phe Gly Lys Glu Ser
                                    90
Thr Gly Glu Leu Ser Ser Ala Lys Leu Trp Tyr Gly Leu Asn Asp Phe
                                105
Arg Val His Asp Leu Arg Gly Ser Met Arg Lys Gln Arg Lys Gln Lys
                            120
Gln Lys Arg Asp Pro Glu Thr Gly Gln Phe Met Lys Thr Glu Lys Gly
                        135
                                            140
Ala Arg Gly Ala Thr Phe Ile Pro Lys Ser Ala Gly Leu His Ser Met
                    150
                                        155
Ser Trp Pro Asp Ser Phe Val Ala Lys Arg Tyr Ser Val Lys Ser Ile
                165
                                    170
Trp Ile Arg Arg Glu Gly Gly Val Glu Glu Ala Arg Val Pro Val
            180
                                185
                                                    190
His Glu Ala Leu Glu Asp Ala Ile Asp Asp Tyr Ile Phe Glu Asn Ile
       195
                            200
Gly Ser Val Phe Met Arg Tyr Phe Glu Gln Asp Leu Arg Gly Arg Val
                        215
Ala Gly Asn Val Gln
                    230
<210> 10463
<211> 197
<212> PRT
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Ala Gly Phe Thr Gly Pro Arg Gly Glu Arg Ser Met Thr Ala Thr
Ala Glu Ala Gly Met Asp Ala Phe Asp Glu Tyr Thr Asn Arg Val Arg
Ala Ala Val Leu Gln Ile Pro Phe Val Lys Thr Phe Gly Val Tyr Pro
                            40
Glu Ile Pro Glu Gly Phe Gln Thr Pro Ala Val Phe Phe Glu Ile Glu
Asn Trp Glu Pro Ser Ser Glu Val Ile Ala Gly Ser Ala Leu Thr Val
                    70
Ser Leu Asn Cys Ser Leu Tyr Val Leu Arg Glu Phe Ala Ala Asp Gln
                                    90
Tyr Gly Gln Lys Ala Arg Asn Ala Ala Leu Tyr Ile Ser Ser Trp Ile
Asp Gly Arg Gly Phe Gly Pro Ala Thr Leu Pro Ala Thr Phe Gly Gly
                            120
Ser Glu Pro Ala Asp Trp Ile Lys Asn Gly Lys Ala Leu Gly Ser His
                        135
                                            140
Ser Val Trp Cys Val Ser Phe Ser Gln Val Val Gly Val Gly Val Gly
                    150
                                        155
Pro Phe Val Thr Pro Ala Asp Ala Pro Leu Leu Lys Glu Val Phe Val
                                    170
Gly Leu Ala Pro Asp Ile Gly Lys Glu His Glu Ala Asp Tyr Val Arg
            180
                                185
Val Phe Pro Arg
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<210> 10464
<211> 66
<212> PRT
<213> Enterobacter cloacae
<400> 10464
Gly Arg Arg Gly Lys Arg Ser His Pro Arg Gln Gln Ala Ala Tyr Lys
Leu Thr Val Leu Leu Ile Pro Phe Arg Phe Leu Ala Cys Arg Leu Val
                                 25
Val Asp Ile Val Phe Asn Thr Ser Phe Lys Arg Asn Cys Leu Val Lys
                             40
                                                 45
Leu Arg Met Gly Val Leu Leu Leu Thr Gly Leu Leu Ala Gly Cys
Asp
65
<210> 10465
<211> 104
<212> PRT
<213> Enterobacter cloacae
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Asn Thr Leu His Gly Gln Leu Ala Asp Met Lys Val Lys Ile Ser Arg
Met Ser Phe Gly Cys Pro Leu Ala Asp Leu Arg Arg Ser Lys His Ser
            20
                                                     30
Glu Pro Arg Tyr Gly Ala Gln Asn Asp Asn Arg Asn Asn Glu Phe Cys
        35
Gln Asp Ala Val Ser His Gln Gly Asn Ala Ala Ile Ile Ile Pro Phe
                        55
Pro Asp His Asn Phe Lys Pro Gly Thr Gln Val Lys Pro Val Cys Cys
                    70
                                                             80
Ser Gln Lys Lys His Gln Asn Lys Gln Ser Arg Leu Gly Lys Gln Tyr
                85
                                     90
Pro Pro Pro Gly Thr Val Glu
            100
<210> 10466
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<222>(71)
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Asp Glu Ala Gln Val Arg Lys Arg Leu Met Pro Val Pro Val Asp Xaa
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                                                     15
20
                              25
Xaa Xaa Xaa Gly Leu Thr Asp Lys Asp Val Ala Gly Lys Tyr Val Asn
                          40
                                             45
Ala Arg Gly Glu Gln Arg Met Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
```

<400> 10469

```
70
                                    75
85
                                 90
Xaa Xaa Xaa Pro Pro His Ser Cys Leu Ser Val Tyr Pro Cys Gln Ser
                             105
                                               110
Ala Val Met Ala Ala Val Ser Ile Ala Thr Pro Asp
<210> 10467
<211> 85
<212> PRT
<213> Enterobacter cloacae
<400> 10467
Asn Pro Leu Arg Ile Lys Val Ala Val Phe Ser Met Arg Gly Glu Lys
Arg Val Asp Glu Lys Ile Gly Gly Leu Cys Gly Ile Ser Phe Ala Gly
          .20
Asn Phe Ala Arg Gln Arg Ala Gly Ser Ala Gly Ser Ala Ser Gln Arg
                         40
Leu Glu Arg Ser Asp Ala Arg Pro Ser Gly Ala Asp Pro Gly Ala Phe
                      55
Glu Arg Tyr Cys Arg Arg Pro Ser Gly Val Gln Pro Arg Arg Pro
                  70
Gly Arg Ala Gly Asp
<210> 10468
<211> 126
<212> PRT
<213> Enterobacter cloacae
<400> 10468
Glu Asp Val Gly Trp Arg Val Thr Arg Ala Thr Lys Lys Asp Leu Ser
Trp Phe Asn Leu Ser Asn Tyr Asp Phe Ile Asn Asn Leu Thr Leu Ser
          20
Glu Phe Ile Val Glu Leu Glu Trp Arg Asp Phe Leu Tyr Arg Asn Val
Asn Glu Asp Asp Leu Phe Phe Asp Glu Glu Tyr Glu Ile Lys Tyr Gln
                      55
Arg Ile Phe Gly Gly Asp Pro His Leu Asp Ile Pro Asn Glu Glu Glu
                                     75
Lys Glu Ile Asp Glu Phe Val Arg Lys Val Asn Ser Glu Thr Pro Ser
              85
                                 90
Leu Leu Asn Met Tyr Gly Thr Leu Pro His Leu Pro Ser Asp Pro Arg
                             105
Val Ser Pro Ile Ser Phe Thr Glu Leu Ser Lys Tyr Gly
      115
                         120
<210> 10469
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<212> PRT
<213> Enterobacter cloacae
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Pro Leu Arg Ile Arg Val Ser Ile Ser Ala Ile Gly Ser Cys Met Leu 10 Ile Cys Leu Tyr Ser Arg Asp Ser Ile Gly Asn Tyr Gln Leu Ala Phe 20 25 Phe Lys Pro Gly Thr Ser Pro Arg Met Ala Ala Ser Arg Ser Leu Ile 40 Arg Xaa Ser Pro Gly Gly Gly Lys Asp Lys Arg Lys Gly 55 <210> 10470 <211> 107 <212> PRT <213> Enterobacter cloacae <400> 10470 Asn Ser Leu Lys Gln Val Glu Tyr Ser Arg Tyr Ser Ile Ser Ala Ser 1.0 Pro His Pro Ser Trp Gln Ala Lys Lys Glu Trp Leu Ser Gln Gln Leu 25 Val Thr Ser Met Cys Leu Ser Ala Lys Cys Arg Lys Ala Asn Asn Thr 45 Ala Ala Val Val Gln Thr Gly Tyr Ser Asp Leu Leu Cys Leu Leu 55 Asn Thr Asp Leu Asn Leu Ser Leu Lys Leu Ala Ala Ile Phe Arg Tyr 75 Gly His Leu Val Leu Asn Ser Leu Ile Ala Thr Ser Tyr Asn Val Glu Ile His Cys Gly Tyr Tyr Asn Tyr Tyr 100 <210> 10471 <211> 62 <212> PRT <213> Enterobacter cloacae <400> 10471 Leu Ala Phe Glu Val Tyr Thr Phe Lys Pro Gly Ala Thr Ala Glu Ser Phe Tyr Leu Ser Leu Ala Gln Ala Arg Lys Cys Ser Gln Phe Cys Leu Asn Asn Pro Phe Ser Ile Lys Tyr Asp Leu Arg His Asp Asp Ser Met 40 Thr Pro Pro Arg Tyr Arg Gly Gly Arg Lys Phe Val Asp 50 55 <210> 10472 <211> 249 <212> PRT <213> Enterobacter cloacae <400> 10472 Arg Lys Gln Thr Ser Leu Asn His Asn Thr His Gly Asn Pro Val Trp 10 Val Ile His Leu Asn Gly Lys Glu Val Ile Met Ser Val Glu Leu Lys 25 Thr Phe Gly Gly Ala Tyr Phe Pro Lys Asp Lys Ala Leu Lys Lys Leu 40 Pro Asp Leu Lys Pro Leu Ala Ile Ala Val Asn Ala Leu Asn Lys Ser 55 Ile Ala Glu Ala Val Ile Phe Gly Lys Leu Ala Ala Glu His Pro Glu

```
His Ile Asp Asp Tyr Phe Lys Val Lys Ile Trp Glu His Arg Glu Asp
                                    90
Leu Pro Cys Pro Ala Leu Asp Asp Phe Ser Gln Asp Phe Phe Ser Thr
                                105
Val Ala Thr Trp Asn Val Asn Ala Gly Glu Pro Val Ala Ala Thr Gln
        115
                            120
Pro Glu Val Asp Glu Ser Gln Asp Gln Ser Asp Asp Gln Gln Ala Gly
                        135
                                            140
Glu Met Lys Ser Val Arg Leu Leu Asp Gln His Ser Arg Ala Ala Cys
                    150
                                        155
Leu Ala Leu Phe Gly Pro Val Glu His Ile Thr Ala Ala Gln Tyr Gly
                                    170
                165
Gln Val Val Asp Leu Ile Asn Asp Asp Gly Cys Phe Gln Arg Glu
                                                     190
                                185
            180
Met Ala Glu Ala Phe Thr Arg Glu Pro Arg Val Leu Ala Leu Ser Ala
                            200
                                                 205
        195
Glu Arg Gln Lys Glu Cys Trp Arg Gly Ser Val Lys Pro Cys Trp Phe
                                            220
                        215
Arg Leu Asn Gly Gln Arg Leu Lys Ser Ser Pro Asn Gly Trp Ile
                    230
                                        235
Leu Leu Gln Arg Ser Val Ser Arg
                245
<210> 10473
<211> 80
<212> PRT
<213> Enterobacter cloacae
<400> 10473
Leu Asp Gln Ser Gly Trp Tyr Leu Met Lys Leu Gly Asp Glu Thr Ala
                                    10
Arg Val Val Arg Ala Leu Gln Leu Arg Gly Arg Ala Gly Ala Arg Asp
Ile Ala Cys Arg Ala Gly Met Arg Asn Glu Glu Val Ile Ala Ala Leu
Leu Asp Leu Glu Lys Arg Lys Lys Val Asp Gln Ser Asn Gly Phe Trp
Trp Leu Ala Val Asp Leu Glu Glu Lys Ser Gly Arg Asn Arg Lys
                                                             80
<210> 10474
<211> 81
<212> PRT
<213> Enterobacter cloacae
<400> 10474
Leu Ser His Ser Phe Phe Ala Cys Gln Leu Gly Cys Gly Glu Ala Glu
                                    10
Met Leu Tyr Leu Glu Tyr Ser Thr Cys Phe Asn Glu Phe Tyr Val Glu
            20
                                25
Gln Leu Gln Leu Phe Asn Glu Arg Leu Gly Phe Thr Leu Asn Val Ser
                                                 45
                            40
Leu Arg Asp Gly Ala Thr Ile Phe Arg Val Tyr Pro His Leu Asp Gln
                        55
                                            60
Pro Tyr Leu Ala Gln Asn Val Lys Asn Pro His Leu Tyr Gly Thr Leu
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75

70

<212> PRT <213> Enterobacter cloacae <400> 10475

Thr Glu Ile Thr Phe Ser Ser Pro Asn Ile Leu Ala Thr Asn Lys Met 10 Val Val Leu Met Ile Val Leu Lys Ser Phe Leu Phe Phe Val Gly Ala 20 25 Ala Ala Ala Cys Ala Leu Ile Val Leu Cys Leu Trp Val Asp Met Arg 40 Phe Val Gly His Asp Ile Pro Glu Leu Ser Leu Thr Glu Ile Met Gln 55 Glu Thr Val Leu Ala Ser Ile Val Phe Leu His Phe Arg Leu Ala Lys 70 75 Met Tyr Asp Ser Met Arg Tyr Cys Asn Ile Leu Val Gly Gly Phe Phe 90 Leu Thr Met Leu Ile Arg Glu Leu Asp Ala Leu Phe Asp Leu Ile Ser 105 His Gly Ser Trp Val Trp Phe Ala Leu Ile Thr Ala Val Leu Ala Leu 120 125 Ile Arg Pro Val Met His Phe Arg Ala Thr Leu Glu Gln Leu Ala Lys 135 140 Tyr Thr Gln Ser Pro Trp Tyr Gly Ile Leu Leu Ser Gly Leu Leu Ala 150 155 Val Leu Val Phe Ser Arg Leu Phe Gly Met Gln Val Leu Trp His Ala 165 170 Ile Leu Glu His Gly Tyr Met Arg Val Val Lys Asn Ala Val Glu Glu 180 185 Gly Ser Glu Ser Phe Gly Tyr Met Leu Cys Leu Ala Ala Ser Leu Gly 200 Tyr Tyr Val Thr Phe Pro Ala His Ala Arg Gln Lys 210 215

<210> 10476 <211> 83 <212> PRT

<213> Enterobacter cloacae

<400> 10476

Asn Gln Arg Leu Ser Leu Asp Tyr Gln Gln Lys Glu Ala Gly Met Ser 10 Asp Phe Asp Thr Asp Lys Asn Ala Gln Tyr Ala Gly Asp Lys Ala Lys Asn Lys Leu Asp Glu Leu Ser Gly Ser Ala Gln Gln Phe Gly Glu 40 Phe Val Asp Ser Pro Lys His Gln Val Lys Gly Ala Ala Lys Asn Tyr Ala Val Phe Thr Tyr Glu Ala Asp Arg Ser Ala Leu Arg Cys Ala Gly 70 Gln Gly Gly

<210> 10477 <211> 83 <212> PRT

<213> Enterobacter cloacae

<400> 10477

Ile Cys Arg His Arg Leu Arg Arg Phe Glu Ser Phe Pro His His His 10 Phe Leu Ala Ala Ser Thr Pro Pro Glu Leu Val Gly Lys Ile Asp Gln

30 20 25 Leu Glu Gln Lys Arg Glu Lys Ser Leu Phe Leu Leu Gln Lys Glu Leu 40 45 Gly Ser Arg Val Ser Gly Cys Gly His Arg Ile Met Ala Ile Thr Ser 55 60 Ala Phe Gln Ala Asp Asp Ala Gly Ser Ile Pro Ala Ala Arg Ser Asn 70 Thr Cys <210> 10478 <211> 65 <212> PRT <213> Enterobacter cloacae <400> 10478 Val Pro Gln Arg Ala Gln Pro Leu Ser Phe Val Ala Ser Gly Gln Ala 10 Gly Asn Ser Lys Glu Thr Ala Ser Asp Lys Leu Glu Glu Gly Gly Asp 20 25 Asp Val Lys Ser Ser Trp Pro Leu Arg Val Gly Leu His Thr Cys Tyr 35 40 Asn Gly Ala Tyr Lys Glu Lys Arg Pro Arg Glu Ser Lys Arg Thr Ser 55 65 <210> 10479 <211> 121 <212> PRT <213> Enterobacter cloacae <400> 10479 Val Ala Asp Pro Leu Tyr Lys Arg Tyr Ala Val Thr Pro Arg Arg Cys 1 10 15 Ser His Cys Leu Tyr Val His Gly Phe Arg Phe Phe Phe Thr Pro Leu Ala Gly Val Leu Phe Ala Phe Pro Ser Arg Tyr Trp Phe Thr Ile Gly Gln Ser Gly Val Phe Ser Leu Gly Gly Trp Ser Pro His Ile Gln Thr Gly Tyr His Val Ser Arg Pro Thr Leu Arg Val His Ser Met Cys Ile 70 75 Phe Val Tyr Gly Thr Ile Thr Leu Tyr Arg Arg Thr Phe Gln Thr Val 90 Pro Leu Thr His Lys Leu Ile Gln Thr Pro Gly Cys Ser Pro Phe Ala 105 Arg Arg Tyr Trp Gly Asn Leu Gly 115 <210> 10480 <211> 65 <212> PRT <213> Enterobacter cloacae <400> 10480 Ala Ala Arg Tyr Leu Pro Ala Pro Trp Ala Glu Asp Pro Leu Asn Gln 10 Pro Tyr Thr Thr Asp Ile Met Gly Thr Ala Thr Ala Pro Asp Pro Glu 25 Thr Leu Thr Leu Asp Val Tyr Tyr Lys Thr Asn Ala Ala Ala Ala

40 45 Thr Val Gly Glu Leu Ser Ser Asn Val Thr Tyr Thr Ile Ser Tyr Leu 5.5 65 <210> 10481 <211> 144 <212> PRT <213> Enterobacter cloacae <400> 10481 Cys Arg Thr Gly Lys Ser Ala Gln Thr Ser Gly Val Ile Met Glu Asp Leu Glu Thr Thr Ile Met Glu Leu Leu Val Asn Ala Gly Ala Ala Arg 20 25 Ser Ala Ala Gln Thr Ala Lys Gln Lys Ala Arg Lys Gly Asp Lys Asp 40 Glu Ala Glu Lys Ala Lys Glu Glu Ser Arg Glu Lys Glu Lys Gln Val 55 Pro Asp Lys Arg Ser Arg Ser Lys Ser Val Lys Thr Lys Gly Gln 70 75 Glu Asn Ser Arg Lys Thr Arg Ser Pro Ile Ile Leu Arg Thr Thr Arg 90 85 Arg Thr Arg Arg Lys Asn Arg Ile Arg Arg Ala Thr Arg Lys Ser Lys 100 105 Ile Asp Ala Ser Arg Arg Lys Thr Glu Asn Ala Asp Ile Lys Lys Pro 120 Ala Glu Ala Gly Phe Tyr Ile Tyr Ala His Gln Thr Lys Arg Ser 135 130 <210> 10482 <211> 75 <212> PRT <213> Enterobacter cloacae <400> 10482 Glu Ser Asp Val Glu Lys Glu Gln Leu Val Glu Ile Ala Asn Thr Glu Met Pro Phe Gly Lys Tyr Lys Gly Arg Arg Leu Ile Asp Leu Pro Glu Glu Tyr Leu Leu Trp Phe Ala Arg Lys Asp Glu Phe Pro Ala Gly Arg Leu Gly Glu Leu Met Ala Ile Thr Leu Leu Ile Lys Thr Glu Gly Leu Thr Gln Leu Val Gln Pro Leu Lys Arg Pro <210> 10483 <211> 144 <212> PRT <213> Enterobacter cloacae <400> 10483 His Ile Pro Ile Ala Ala Arg Pro Leu Val Leu Leu Lys Leu Thr Pro Ser Leu Pro Ile Pro Leu Phe Tyr Gly Glu Lys Asp Leu Asn Met Thr 25 Thr Leu Lys Pro Val Ser Leu Ser Ala Met Glu Ile Gly Ser Val Asp 40

Asn Ser Ser Gly Gly Asn Asp Ile Ala Ser Gln Ile Thr Arg Leu Thr

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55
                                             60
Lys Gln Ile Thr Lys Val Thr Gln Gln Leu Lys Glu Val Ala Met Gly
                    70
                                        75
Asp Ala Thr Ala Glu Glu Lys Gln Lys Gln Glu Leu Leu Glu Ser
                                    90
Gln Leu Ala Met Leu Gln Ala Gln Leu Ala Gln Leu Gln Arg Gln Gln
                                105
Ala Glu Glu Ala Met Pro Lys Gln Glu Lys Gly Glu Ala Val Ala Glu
                            120
Gly Ile Asn Lys Pro Ser Ala Glu His Gln Ile Asn Ile Tyr Val
                        135
<210> 10484
<211> 70
<212> PRT
<213> Enterobacter cloacae
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Trp Lys Ile Ser Pro Ser His Gly Ile Trp Arg Gly Glu Leu Ile Arg
Asn Asn Tyr Tyr Pro Gln Ala Ala Arg Gln Gly Gly Glu Tyr Leu Ala
            20
                                25
His Thr Leu Ile His Thr Ser Asp Phe Tyr Leu His Pro His Glu Lys
                            40
Lys Ala Gln Val Ala Lys Phe Ile Asn Arg Phe Ala Phe His Arg Arg
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Leu Trp Arg Ala Arg
<210> 10485
<211> 67
<212> PRT
<213> Enterobacter cloacae
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Tyr Met Ile Val Pro Ser Gly Ile Ser Leu Leu Thr Ala Ile Asp Asp
1
                                    10
Ile Leu Ser Gly Ile Leu Thr Leu Leu Ala Val Leu Asn Thr Asp Ala
            20
Leu Ser Ser Glu His Val Ser Ala Ile Ala Ala Phe Glu Lys Ile Ser
                            40
Arg Gln Lys Asn Val Ala Thr Leu Ile His Pro Glu Ile Phe Ile Ser
    50
Pro Ser
65
<210> 10486
<211> 105
<212> PRT
<213> Enterobacter cloacae
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Arg Pro Val Met Ser Lys Ile Pro Gly Thr Asp Ile Gln Pro Ala Val
                                    10
Gln Arg Arg Val Glu Val Val Ile Phe Pro Ala Ala Ile Phe Ala Ala
            20
                                25
Ile Thr Ile His Val Ile Pro Gln His Gln Arg Gly Asp Pro Gly Ile
                            40
                                                 45
Pro Glu His Arg Val Tyr Ala Ala Ala Cys Asp Met Leu Gln His Gly
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Leu Gly Asp Thr Asp Ile Lys Ala Leu Ser Ala Pro Val Lys Phe Gln

70 75 Pro Ala Phe Trp Gln Asp Gly Leu Glu Ile Ala Pro Leu Pro Gly Ile 85 Ser Gly Ala Gln Pro Ala Phe Phe 100 105 <210> 10487 <211> 146 <212> PRT <213> Enterobacter cloacae <400> 10487 Gln Arg Tyr Asp Ser Ser Leu Gly Lys Val Tyr Ser Asp Gly Arg Gln Arg Asp Gly Gly His Gly Glu Arg Gln Ala Ser Leu Tyr Asn Lys Leu 25 Leu Leu Lys Ser Asp Ile Leu Ile Ala Val Ala Tyr Val Met Arg Phe 35 Leu Phe Ser Phe Cys Leu Gly Leu Leu Val Leu Leu Asn Thr Thr Val 55 Cys Phe Ala Thr Cys Ser Ala Thr Tyr Leu Tyr Asn Pro Val Pro Lys 70 75 Val Pro Leu Leu Thr Asn Ser Ile Ser Leu Gly Lys Asp Ala Pro Val 85 90 Gly Thr Val Leu Tyr Arg Gln Thr Ile Thr Pro Ser Gly Thr Tyr Asp 100 105 Met Lys Cys Asp Ser Asn Thr Asp Val Thr Phe Leu Tyr Ile Ile Ala 115 120 125 Asp Pro Val Gly Leu His Tyr Glu Val Ala Lys Ile Ala Ala Tyr Ile 135 Pro Pro 145 <210> 10488 <211> 83 <212> PRT <213> Enterobacter cloacae <400> 10488 Met Ala Leu Gly Arg Met Thr His Ser Ser Ala Leu Leu Arg Ala Arg 10 Met Val Gln Asp Ile Tyr Asp Ile Gly His Gln Lys Asp Tyr Val Leu 20 25 30 Asp Met Arg Ser Lys Lys Tyr Gln Lys His His Asn Ser Asn Gly Ile 40 Gln Arg Asn Ala Phe Val Leu Leu Val His Gln Thr Thr Gln Asn Ser 55 Cys Ser Tyr Ile Lys Asp Ser Phe Ala Lys Gly Leu Ser Gln Lys Ala 65 70 Phe Ala <210> 10489 <211> 150 <212> PRT <213> Enterobacter cloacae <400> 10489 Thr Leu Lys Lys Gly Gly Leu Cys Glu Arg Lys Asp Arg Asn Lys Lys 10

Val Leu Phe Ile Arg Val Tyr Val Asn Ser Asn Leu His Gly Val Ile

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20
                                25
Met Glu Leu Ser Leu Asn Ile Gly Leu Ser Glu Lys Lys Ser Asn Thr
                            40
                                                45
Ala Ala Leu Phe Lys Thr Lys Ser Ala Lys Val Ile Leu Phe Val Leu
                        55
                                            60
Leu Thr Val Leu Phe Cys Gly Leu Ala Tyr Ala Gly Ser Asp Asp Gly
                    70
                                        75
Ala Leu Gly Asp Ile Trp Ser Tyr Met Ser Glu Ser Met Thr Gly Ala
                                    90
Pro Gly Lys Ile Leu Ala Ala Met Leu Ile Ser Ser Val Tyr Phe
                                105
Ser Val Leu Lys Pro Asn Pro Gly Leu Ala Leu Val Ser Leu Phe Met
                            120
                                                125
Met Leu Val Met Ala Asn Gly Glu Lys Ile Ile Ser Thr Phe Met Asp
                        135
Ala Gly Val Pro Leu
                    150
<210> 10490
<211> 121
<212> PRT
<213> Enterobacter cloacae
<400> 10490
Phe Val Lys Gln Cys Gly Asn Leu Asn Leu Ser Asp Ile Ser Ile Ile
                                    10
Lys Lys Leu Arg Lys Val Ala Thr Tyr Asn Phe Arg Ser Ser Lys Glu
                                25
Ala Leu Ser Trp Pro Leu Pro Asn Lys Val Glu Ser Tyr Leu Val Cys
                            40
                                                 45
Thr Gly Tyr Asn Leu Leu Lys Asn Lys Leu Phe Ile Ser Ala Met Leu
                        55
Ser Ala Ser Phe Thr Thr Gly Leu Thr Ser Arg Leu Asn Val Gln Lys
                    70
                                        75
Ser Asn Phe Ser Asn Glu Leu Leu Thr Ile His Leu Tyr Ala Phe Leu
                                    90
Thr Gln Ala Tyr Met Leu Ala His Ser Leu Asn Ala Val Glu Gln Asp
            100
                                105
Gly Phe Val Arg Thr Leu Phe Thr
        115
<210> 10491
<211> 119
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(68)
<400> 10491
Ser Cys Met Arg Gly Phe Ile Pro Leu Ser Gly Phe Leu Met Ser Lys
                                    10
Gln Asn Asp Val Pro Gln His Thr Tyr Arg Phe Pro Phe Arg Ile Asn
                                25
Met Pro Leu Leu Ile Leu Phe Trp Asp Ala Lys Lys Leu Gly Leu Ala
                            40
Phe Ile Leu Val Ala Phe Gly Asn Ile Phe Glu Cys Phe Gly Phe Ser
                        55
                                            60
Val Val Ala Xaa Val Val Tyr Trp Ile Ala Tyr Asn Lys Ala Ala Glu
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<400> 10494

Ser Gly Ile Arg Gly Leu Leu Lys His Lys Leu Trp Trp Leu Gly Phe 85 90 Leu Pro Ser Lys Ala Val Phe Ser Ser Arg Tyr Phe Asn Asp Pro Phe 105 Ile Arg Asp Leu Tyr Ser 115 <210> 10492 <211> 179 <212> PRT <213> Enterobacter cloacae <400> 10492 Val Tyr Leu Leu Asp Val Ser Ala Leu Phe Gly Lys Phe Glu Val His Val Ser Cys Ser Lys Gln Glu Glu Asp Met Asn Asn Ser Lys His Thr 30 20 25 Val Ile Glu Val Asp Thr Asn Leu Val Glu Ile Glu Lys Gly Phe Asn 45 40 Pro Arg Glu Ala Val Ile Gly Asp Leu Cys Tyr Glu Gln Glu Pro Val 55 Lys Ser Met Ile Val Ser Ile Lys Gln Ala Phe Lys Glu Gly Arg Gln 70 Val Asp Met Ile Lys Val Val Lys Arg Lys Gly Lys Tyr Leu Val Arg 85 -90 Gln Gly His Thr Arg Phe His Gly Leu Lys Leu Ala Ile Ser Glu Gly 100 105 Ala Asn Ile Pro Lys Leu Ser Val Ile Leu Ile Asp Tyr Lys Asn Glu 120 125 Ile Glu Glu Tyr Leu Glu Asn Leu Asp Gly Asn Arg Ser Asn Gly Leu 135 140 Asn Pro Val Gly Gln Ala His Ala Leu Ala His Ala Val Ser Leu Gly 150 155 Tyr Ser Val Glu Glu Leu Gly Lys Val Arg Ile Ser Gly Glu Ile Leu 165 170 Leu Gly <210> 10493 <211> 66 <212> PRT <213> Enterobacter cloacae <400> 10493 Leu Asn Ser Ser Val Ile Arg Phe Ser Phe Gly Lys Leu Phe Ile Thr Tyr Ser Cys Lys Cys Phe Leu Arg Ile Tyr Leu Asn Ala Ile Ser Ile 20 25 Pro Val Asn Ala Phe Leu Ile His Ser Asn Ala Phe Arg Met His Pro 40 45 Asn Ala Gly Ser Phe His Lys Val Thr Ile Ile Asn Glu Leu Lys Met 55 Pro 65 <210> 10494 <211> 72 <212> PRT <213> Enterobacter cloacae

5834 His Val Ser Glu Ser Pro Ala Lys Cys Lys Arg Phe Ala Leu Lys Arg 10 Met Arg Asn Leu Arg Glu Ile Ala Gly Ala Lys Leu Lys Ile Leu 25 Lys Phe Lys Glu Leu Leu Met Ser Asn Tyr Leu Lys Ile Arg Phe Cys 40 Thr Phe Ser Leu Leu Val Ser Leu Lys Glu Gln Gly Lys Val Cys Ala 55 Thr Ala Arg Met Pro Thr Glu <210> 10495 <211> 314 <212> PRT <213> Enterobacter cloacae <400> 10495 Ile Arg Gly Ser Tyr Met Val Tyr Glu Asn Glu Leu Trp His Ser Phe 10 Leu Leu Arg Ser Gln Ile Met Tyr Asn Leu Ser Asn Cys Arg Asn Ile Ile Ser Lys His Gly Ala Leu Arg Tyr Asp Ala Phe Pro Arg Phe Glu 35 40 Leu Ile Asp Met Tyr Lys Leu His Ser Leu Gln Asp Ile Tyr Asp Ile 60 Leu Ala Thr Arg Asn Gly Tyr Ile Leu Thr Ser Asn Ile Val Ser Leu 70 75 Ser Ser Gly Val Tyr Gly Tyr Phe Asn Ala Ile Glu Asp Ala Cys Arg 85 90 Lys Asn Phe His Ile Thr Asn Ser Tyr Pro Leu Val Asn Ile Ser Asn 105 Ile Arg Tyr Cys His Lys Cys Ile Val Glu Asp Ile His Ser Lys Gly 115 120 Ile Gly Tyr Leu Arg His Arg Trp Leu Phe Glu Ser Lys Cys Ala Val 135 His Ser Thr Ser Leu Tyr Glu Val Cys Phe Asp Asn Tyr Leu Asn Ala 150 155 Val Lys Gly Leu Ser Asp Leu Ile Ile Ser Gly Ile Asn Pro His Gly 165 170 Tyr Cys Ser Leu Val Val Asp Val Ser Asn Pro Phe Lys Asn Pro Val 180 185 190

Tyr Ile Leu Pro Cys Ala Arg Asn Lys Ile Leu Lys Trp Ile Ser Asp 200 205 Asn Lys Asn Met Leu Ile Tyr Phe Leu Phe Asp Leu Phe Lys Cys Lys 215 220 Ser His Ser Ser Leu Ser Lys Val Ile Glu Val Lys Ile Met His Asp 230 235 Arg Tyr Ile Ser Ala Val Phe Lys Met Leu Ser Glu Val Asn Phe Cys 245 250 Asn Phe Asn Ser Phe Ile Ser Asp Ile Phe Glu Asp Val Ser Tyr Ala 260 265 270

Ser Ile Gly Leu Asp Asp Tyr Ser Val Asn Val His Phe Leu Arg Leu 275 280 285

Arg Ala Ala Asp Cys Lys Phe Cys Gln Leu Asn Gly Lys Tyr Phe Cys

arg Ala Ala Asp Cys Lys Phe Cys Gin Leu Ash Gly Lys Tyr Ph 290 295 300 Ser Leu Tyr Ash Val Lys Leu Arg

Ser Leu Tyr Asn Val Lys Leu Leu Arg 305 310

<sup>&</sup>lt;210> 10496

<sup>&</sup>lt;211> 557

<sup>&</sup>lt;212> PRT

## <213> Enterobacter cloacae

<400> 10496 Met Asn Ala Asp Lys Asn Asp Met Asn Cys Phe Ser Leu Arg Glu Gly 10 Asp Gly Arg Phe Glu Ile Ala Cys Glu Phe Asp Asp Leu Pro Asp Phe 25 Ile Met Ile Asp Asp Arg Val Gln Thr Thr Leu Ala Ser Glu His Leu Leu Asn Glu Asp Gly Asn Phe Glu Ile Val Lys Thr Phe Lys Ala Thr Thr Ser Gly Lys Pro Glu Gln Thr Cys Ile Arg Cys Ile His Pro Asp 70 Glu Glu Pro Leu Arg Asn Leu Leu Gly Met Lys Ile Ser Glu Leu Lys 90 Ala Val Gly Lys Glu Val Glu Lys Asn Val Ala Asp Lys Arg Thr Ala 100 105 Ser Leu Trp Arg Gln Ala Ile Arg Glu Ala Ala Pro Tyr Thr Cys 120 Ser Glu Ile Met Leu Asp Val Asp Lys Glu Phe Gly Thr Asp Thr Lys 135 140 Ser Leu Trp Gly Lys Ile Leu Asp Leu Pro Thr Tyr Ala Ile Phe 150 155 Lys Ala Asp Arg Glu Ser Ser Asp Gly Asp Ser Glu Ala Lys Asn Pro 170 165 Leu Gln Gln Ala Val Lys Asp Ala Gln Ala Ala Leu Gln Asp Lys Ile 180 185 190 Thr Ala Leu Glu Asn Glu Ile Gln Asp Ser Val Leu Asp Val Ala Gln 200 205 Arg Thr Leu Asp Lys Leu Arg Glu Met Ala Pro Glu Leu Ala Ser Glu 215 220 Leu Thr Pro Arg Phe Lys Glu Lys Pro Lys Trp Thr Phe Asn Phe Thr 230 235 Leu Asp Gly Glu Asn Gly Ile Pro Ile Asn Lys Arg Gly Ser Gly Ile 24.5 250 Arg Arg Leu Ile Leu Leu Asn Phe Phe Arg Ala Glu Ala Glu Lys Asn 265 Val Ala Gly Thr Pro Arg Asn Val Ile Tyr Ala Ile Glu Glu Pro Glu 275 280 Thr Ser Gln His Pro Asn Tyr Gln Met Met Leu Met Lys Ala Leu Leu 295 Ala Leu Ala Gly Gln Pro His Arg Gln Ile Ile Val Thr Thr His Val Pro Ala Leu Ala Gly Leu Ile Pro Val Glu Gly Val Arg Tyr Val Thr 330 Arg Asn Glu Ala Gly Glu Pro Val Val Lys Met Pro Asp Asp Ala Val 345 Leu Lys Glu Ala Thr Glu Ser Leu Gly Val Leu Pro Glu Thr Gly Met 360 Glu Arg Ala Gln Gly Ile Val Leu Val Glu Gly Lys Ser Asp Val Thr 375 380 Phe Leu Arg His Ala Ala Ser Ser Leu Lys Gln Ser Gly Ala Leu Pro 390 395 Ala Ser Leu Glu Asp Val Lys Ile Val Pro Val Leu Ile Gly Gly Cys 410 405 Gly Ser Val Lys His Trp Val Thr Leu Asn Leu Ala Lys Asp Leu Gly 425 420 Leu Pro Trp Cys Val Phe Leu Asp Ser Asp Ile Gly Gly Asp Pro Ala 440 445 Gln Val Leu Ser Ile Gln Lys Arg Lys Lys Glu Val Glu Glu Ala Gly

Lys Val Phe Phe Ala Thr Arg Lys Arg Glu Ile Glu Asn Tyr Leu Cys 470 475 Pro Asp Leu Ile Glu Glu Ile Thr Gly Val Ala Val Thr Phe Thr Asp 485 490 Thr Cys Asp Ala Lys Lys Ile Ile Gly Arg Ala Val Gly Met Lys Pro 500 505 Asp Asn Val Leu Asp Lys Phe Trp Pro Gln Met Thr Ser Glu Arg Ile 520 Ile Ser Arg Ser Thr Tyr His Asp Gly Thr Gln Glu Arg Ser Glu Leu 535 Val Glu Ile Leu Ser Asp Ile Val Ser Met Thr Arg 550 <210> 10497 <211> 183 <212> PRT <213> Enterobacter cloacae <400> 10497 Gln Ile Ile Asp Arg Pro Ser Glu His Leu Trp Ile Ser Leu Asn Gln 10 Ala Gly His Pro Val Lys Phe Glu Arg Asp Ile Ala Phe Phe Gly Pro Gly Phe Glu Lys Leu Glu Asp Phe His Asp Phe Arg Ser Glu Val Lys 40 His Asp Pro Val Arg Tyr Gln Leu Ile Ile Cys Leu Cys Gln Glu 55 60 Gln His Ile Ala Asp His Phe Gly His Pro Val Ile Leu Phe Lys Thr 70 75 Gly Ile Glu Asp Ile Leu Lys Phe Pro Leu Cys Ser Ile Leu Thr Gln 90 Cys Asp Ile Ser Leu Arg His Gln Ile Gly Asp Gly Arg Ser Asp Leu 100 105 Met Arg Asp Ile Gly Arg Glu Ile Gly Leu Ala Gly Lys Asp Ile Leu 120 125 Asn Leu Ser Asn His Met Ile Glu Arg Asp Asn Gln Leu Leu Gln Leu 135 Asn Gly Asn Ala Cys Pro Phe Gln Ser Arg Ile Lys Ile Leu Gly Gly 155 Asp Val Leu Asn Gly Ile Val Asp Ile Thr Lys Gly Gln Val Pro Leu 170 165 Asp Gly Gln Arg Phe Glu 180 <210> 10498 <211> 61 <212> PRT <213> Enterobacter cloacae <400> 10498 Thr Gln Lys Lys Thr Val Pro Gln Phe Ile Phe Val Asn His Ile Thr 10 Pro Ser Tyr Leu Ile Ser Ser Ile Phe Leu Arg Ser Ile Ile Val Ile 20 25 Gly Ser Leu Ser Leu Tyr Phe Lys Ser Gln Pro Cys Pro Pro Ser Lys 40 Ala Ser Arg Leu Val Ser Asp Ile Glu Tyr Cys Pro 55

<210> 10499 <211> 112

5837 <212> PRT <213> Enterobacter cloacae <400> 10499 Phe Pro Ala Val Met Leu Thr His Tyr Gly Asp Arg Glu Trp Leu Arg 10 Pro Val Leu Asp Lys Val Asn Thr Ser Thr Ala Val Pro Gly Ala Glu 25 Ala Gln Thr Pro Ala Ala Ile Ser Ser Pro Pro Asn Ser Leu Leu His Leu Asn Asn Leu Phe Leu Pro Thr Cys Ile Thr Val Arg Val Ala Val 55 Val Tyr Arg His Pro Val Met Gln Ala Met Ala Tyr Lys Glu Ala Asn 70 75 Pro Leu Met Phe Val Arg Ile Ile Val Pro Met Leu Ala Arg Val Met 85 90 Asn Thr Asn Asn Ser Arg Cys Tyr Pro Trp Glu Asp Arg Lys Gln 100 105 <210> 10500 <211> 76 <212> PRT <213> Enterobacter cloacae <400> 10500 Val Asn Ile Thr Ala Gly Asn Tyr Arg Cys Leu Leu Leu Ser Thr Ser 10 Gly Ile Ile Asn Ala Thr Phe Ile Leu Pro Glu Cys Asn Phe Ser Asp Cys Pro Tyr Met Glu Asn Gln Ser Tyr Ile Glu Ile Leu Gln Lys 40 Tyr Asn Asn Lys Ile Val Trp Lys Lys Asn Asn Val Pro Ala Asn Cys 55 Arg Gly Asp Asp Tyr Gln Ala Ser Met Arg Pro 70 <210> 10501 <211> 262 <212> PRT <213> Enterobacter cloacae

<400> 10501

Val Val Ile Leu Arg Gln Phe Cys Pro Ala Ala Thr Ala Phe Phe Ala Ile Arg Gln Ser Ile Met Gln Arg Lys Leu Ser Ile Lys Pro Gln Leu Leu Ile Lys Arg Ile Glu Leu Phe Ala Gly Asn Ile Asp Lys Asn Lys Phe Ser Ile Ser Pro Phe Lys Gly Ser Asp Leu Lys Ile Phe Glu Pro Ser Ile Ile Asn Thr Gly Ser Gly Ser Ala Leu Asn Ile Asn Ile Lys 70 75 Trp Asp Tyr Pro Tyr Glu Leu Lys Met Arg Gln Leu Asn Glu Cys Tyr 85 90 Lys Ser Ile Asn Lys Glu Ala Lys Leu Glu His Glu Ile Asn Asp Lys 100 105 Leu Gly Val Arg Cys Leu Glu Ile Asn Thr Gly Glu Ile Val Leu Tyr 120 125 Pro Leu Thr Asn Thr Asp Leu Ile Asp Phe Met Ala Pro Ile Asn Val 135 140 Glu Lys Lys Glu Tyr Lys Thr Arg Ala Pro Phe Ser Ile Phe Asn Ile

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150
                                       155
Met Ile Asn Asp Ala Met Thr Leu Leu His Ile Glu Asn Lys Leu Thr
               165
                            170
Lys Ala Val Glu Gly Pro Ser Leu Asn Ile Ser Tyr Thr Asp Val Glu
                               185
Gly Lys Lys Tyr Ser Leu Gln Tyr Lys Ser Tyr Phe Ile Val Lys Glu
                           200
Ile Thr Ala Leu Leu Tyr Thr Asn Ser Ile Ser Gly Ile Leu Phe Phe
                       215
Glu Gly Thr Lys Met Pro Leu Ala Asn Arg Val Asn His Leu Tyr Lys
                                        235
                   230
Lys Gln Lys Gly Ile Phe Ile Asn Phe Val Arg Asn Lys Leu Gln Asn
                                    250
                245
Ile Lys Leu Arg Ser
            260
<210> 10502
<211> 222
<212> PRT
<213> Enterobacter cloacae
<400> 10502
Arg Met Thr Thr Leu Lys Ile Lys Tyr Leu Tyr Gly Lys Ala Leu His
Leu Asn Gln Val Ile Asp Gly Lys Thr Gly Ile Arg Leu Ser Asp Leu
            20
                                25
Ser His Tyr Ser Arg Leu Glu Asn Glu Lys Met Arg Asp Asp Glu Met
        35
                            40
Ser Lys Val Phe Ile Ala Lys Arg Glu Glu Ile Ile Met Glu Val Asn
                        55
Gly Ile Arg Ile Asn Thr Ser Asp Leu Thr Asn Asp Pro Ile Ile Arg
                    70
Ile Thr Pro Arg His Cys Tyr Cys Leu Cys Leu Ser Ser Lys Gly Asp
                8.5
                                    90
Asp Asp Tyr Leu Tyr Ser Asn Phe Gln Ala Asp Thr Cys Ile Ala Phe
                                105
Asp Val Asp Lys Leu Glu Glu Arg Leu Ser Ile Ala Ser Gln Lys Phe
                            120
Gln Gly Ser Phe Val Val Gly Asp Asp Ile Ile Tyr Tyr Asn Gln Thr
                       135
                                            140
Ser Leu His Gly Leu Gly Gln Thr Pro Glu Lys Leu Val Phe Tyr Lys
                   150
                                        155
Pro Asp Phe Phe Ser His Glu His Glu Tyr Arg Ile Ala Trp Phe Tyr
                                    170
               165
Pro Leu Asp Lys Asp Gly Phe Arg Ala Gly Asp Lys Asn Ile Pro Phe
           180
                               185
                                                    190
Thr Phe Lys Asn Glu Ser Ser His Leu Phe Phe His Lys Glu Arg
                           200
       195
Ser Phe Ile Thr Asp Cys Ile Ile Asn Val Phe Arg Lys
                       215
<210> 10503
<211> 106
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
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<400> 10503

<222>(93)

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Arg Val Glu Arg Pro Met Ile Arg Cys Thr Phe His Leu Asn Asn Ser
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Gln Leu Ser Thr Leu Ser Cys Pro Gly Val Gly Phe Phe Pro Ala Tyr
            20
                                25
Ser Gly Asn Ala Gly Glu Asn Arg Asn Asn Pro Asp Lys Ile Ala Val
                            40
Ala Gly Ile Gly Pro Leu Pro Pro Gly Lys Tyr Tyr Ile Val Met Arg
                        55
                                             60
Pro Gly Ser Ser Ala Ala His Phe Thr Lys Ser Phe Thr Ser Ser Ile
                    70
                                        75
Leu Ser Gly Ser Asn His Phe Lys Ser Phe Gly Ser Xaa Phe Thr Thr
                                    90
Arg Pro Arg Thr Thr Ile Ser Pro Pro Ser
<210> 10504
<211> 80
<212> PRT
<213> Enterobacter cloacae
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<400> 10504 Glu Ser Thr Ser Leu Ile Gln Asn Tyr Tyr Pro Asp Ile Ala Asp Glu 10 Ile Arg Arg Ile Ala Asp Asn Ile Pro Arg Arg Ser Arg Ala Ala Leu Arg Glu Lys Leu Lys Asp Ala Asn Ala Lys Asn Lys Val Leu Gln Asp 35 Glu Ile Gln Gln Leu Gln Leu Arg Ile Ser Lys Gln Ala Thr Ile Asn 55 Glu Met Leu Asn Tyr Asn Leu Lys Asn Lys Pro Ser Arg Asn Lys

<210> 10505 <211> 396 <212> PRT <213> Enterobacter cloacae

<400> 10505 Ser Gln Leu Ala His Phe Leu Ala Lys Thr Gly Cys Pro Arg Glu Ile Phe Phe Pro His Leu Cys His Gln Gly Pro Ile Ile Pro Asn Lys Asn 25 Leu Asp Lys Tyr Glu Lys Cys Thr His Ser Tyr Lys Lys Phe Asp Ile 40 Pro Asn Leu Val Ala Asp Glu Asn Glu His Asp Met Ser Ser Gly Leu 55 Asp Arg Val Lys Thr Ser Ser Glu Asp Glu Met Ser Thr Glu His Val 70 Asp His Lys Thr Ile Ala Arg Phe Ala Glu Asp Lys Val Asn Leu Pro Lys Val Lys Ala Asp Glu Phe Arg Glu Gln Ala Lys Arg Leu Gln Asn 105 Lys Leu Glu Gly Tyr Leu Ser Asp His Pro Asp Phe Ser Leu Lys Arg 120 125 Met Ile Pro Ser Gly Ser Leu Ala Lys Gly Thr Ala Leu Arg Ser Leu 135 140 Asn Asp Ile Asp Val Ala Val Tyr Ile Ser Gly Ser Asp Ala Pro Gln 155 150 Asp Leu Arg Glu Leu Leu Asp Tyr Leu Ala Asp Arg Leu Arg Lys Ala 170

Phe Pro Asn Phe Ser Pro Asp Gln Val Lys Pro Gln Thr Tyr Ser Val

```
180
                               185
Thr Val Ser Phe Arg Gly Ser Gly Leu Asp Val Asp Ile Val Pro Val
                           200
                                              205
Leu Tyr Ser Gly Leu Pro Asp Trp Arg Gly His Leu Ile Ser Gln Glu
                        215
                                            220
Asp Gly Ser Leu Leu Glu Thr Ser Ile Pro Leu His Leu Asp Phe Ile
                    230
                                        235
Lys Ala Arg Lys Arg Ala Ala Pro Lys His Phe Ala Gln Val Val Arg
               245
                                   250
Leu Ala Lys Tyr Trp Ala Arg Leu Met Lys Gln Glu Arg Pro Asn Phe
            260
                                265
Arg Phe Lys Ser Phe Met Ile Glu Leu Ile Leu Ala Lys Leu Leu Asp
                                                285
        275
                            280
Asn Gly Val Asp Phe Ser Asn Tyr Pro Glu Ala Leu Gln Thr Phe Phe
                        295
                                            300
Thr Tyr Leu Val Ser Thr Glu Leu Arg Glu Arg Ile Val Phe Glu Asp
                    310
                                        315
Asn Tyr Pro Ala Ser Lys Ile Gly Lys Leu Ser Asp Leu Val Gln Ile
                                    330
                325
Ile Asp Pro Val Asn Pro Val Asn Asn Val Ala Arg Leu Tyr Thr Gln
            340
                                345
                                                    350
Ser Asn Val Asp Ala Ile Ile Asp Ala Ala Met Asp Ala Gly Asp Ala
                            360
Ile Asp Ala Ala Phe Tyr Ala Pro Thr Lys Gln Leu Thr Ile Thr Tyr
                        375
Trp Gln Lys Val Phe Gly Ser Ser Phe Gln Gly
                    390
<210> 10506
<211> 189
<212> PRT
<213> Enterobacter cloacae
<400> 10506
Pro Ile Gly Arg Lys Phe Ser Val Leu His Ser Arg Gly Glu Ile Ile
Met Ser Ser Tyr Ser Tyr Thr Val Ala Glu Thr Gln Thr Phe Ser Val
Thr His Ala Arg His Met Ala Ala Lys Val Ala Thr Asp Leu Arg Arg
Met Gln Arg Phe Tyr Gly Tyr Pro Ser Asp Ala Asp Ile Glu Ala Tyr
                        55
Glu Glu Glu Leu Val Val Ile Leu Lys Ala Gly Tyr Leu Gly Glu Val
                                        75
Ser Tyr Gly Phe Gln Lys Asn Asn Trp Ile Glu Pro Thr Leu Arg
Tyr Thr Ala Gly Asp Leu Leu Gly Ser Gly Thr Asp Asp Pro Gly
                                105
                                                    110
Lys Ile Arg Gln Gly Lys Asp Val Ser Gly Ala Ser Phe Tyr Ser Phe
                           120
                                                125
Met Thr Tyr Ser Ser Lys Tyr Leu Asn Ala Thr Gln Ser Glu Lys Asp
                                            140
                       135
Thr Ala Leu Lys Asp Leu Pro Phe Lys Arg Val Gly Ala Gln Ser Pro
                   150
                                       155
Gly Ile Asn Gly Tyr Leu Glu Asn Asp Lys Thr Tyr Ser Ala Gly Gly
              165
                                   170
Arg Ser Leu Thr Arg Thr Ser Val Arg Asn Phe Val
                                185
```

<210> 10507 <211> 199

<212> PRT

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<213> Enterobacter cloacae
<400> 10507
Ile Asn Glu Val Leu Ser Tyr Ser Ser Pro Ser Gly Ser Ser Asn Gly
                                    10
Tyr Ser Ser Gly Gly Gly Ser Ser Ser Ser Thr Arg Pro Arg Trp
Ser Arg Ala Gly Ser Ser Val Ile Tyr Thr Pro Ala Glu Val Arg Thr
His Thr Pro Ala Arg Glu Asn Val Glu Arg Arg Ala Ser Val Pro Asp
                        55
Leu Arg Asp Val Phe Leu Cys His Ala Trp Asp Asp Arg Lys Asp Ala
                    70
                                        75
Ala Lys Glu Leu His Asp Gln Leu Glu Met Asn Gly Val Ser Val Trp
Phe Ser Glu Lys Asp Val Leu Leu Gly Ala Thr Leu Leu Arg Glu Ile
            100
                                105
                                                     110
Asp Glu Gly Leu Ala Lys Ser Arg Val Gly Ile Val Leu Val Thr Pro
        115
                            120
Ala Leu Leu Lys Arg Leu Ala Gly Glu Gly Ile Ala Asp Lys Glu Leu
                        135
                                            140
Ser Ala Leu Leu Ala Arg Asp Leu Leu Val Pro Ile Val His Asn Thr
                    150
                                        155
Thr Tyr Glu Asp Leu Arg Glu Val Ser Pro Leu Leu Gly Ser Arg Ser
                165
                                    170
Gly Leu Ser Thr Ala Glu Asp Ser Met Ala Asn Ile Ala Ser Lys Leu
            180
                                185
Ala Glu*Leu Val Thr Ile
        195
<210> 10508
<211> 72
<212> PRT
<213> Enterobacter cloacae
<400> 10508
Lys Phe Ile Lys Ile Phe Asp Ile Glu Ile Leu Thr Gln Ser Asn Phe
Ser Gly Phe Leu Glu Lys His Phe Arg Gln Ser Cys Val Trp Leu His
Leu Phe Leu Ser Asn Ser Asn Arg Asp Leu Ala Tyr Asn Leu Pro Ala
                            40
Ile Leu Lys Pro Gly Asn Tyr Val Lys His Arg Asp Leu Thr Gln Glu
                        55
Ile Leu Trp Asn Thr Leu Phe
<210> 10509
<211> 74
<212> PRT
<213> Enterobacter cloacae
<400> 10509
Glu Ile Ala Ala Ala Val Ser Gly Phe Glu Arg Pro Ser Ser Glu Met
                                    10
Tyr Ser Thr Pro Pro Val Leu Asn Ile Pro Ser Leu Val Thr Ile Ser
                                25
Leu Asp Asp Thr Glu Phe Gly Leu Gly Asp Lys Ser Ser Phe Lys Gly
```

Phe Ser Met Ser Ile Ser Lys Thr Gly Ile Ile Pro Ala Val Ile Leu

```
60
                        55
Ala Ile Cys Ser Gly Ser Asp Ile Glu
<210> 10510
<211> 87
<212> PRT
<213> Enterobacter cloacae
<400> 10510
Ile Ser Lys Glu Val Ala Leu Met Asp Glu Lys Ile Val Leu Thr Arg
Gln Gln Ile Leu Ser Ser Ala Leu Lys Val Ser Lys Cys Arg Ser Leu
            20
                                25
Val Lys Arg Arg Phe Gln Ser Leu Gly Leu Lys Tyr Ala Asp Ser Gln
                            40
Glu Ile Pro Asp Arg Leu Thr Met Ile Asp Lys Asn Ala Phe His His
                        55
Phe Gly Lys Asn Leu Ser Asp Pro Thr Ile Ser Ile Pro Tyr Ser Ser
                    70
                                         75
Met Gly Lys Tyr Pro Cys Pro
<210> 10511
<211> 217
<212> PRT
<213> Enterobacter cloacae
<400> 10511
Lys Gly Lys Arg Tyr Leu Cys Ser Ala Val Glu Gln Pro Ser Leu Phe
                                    10
Asn Asn Glu Gln Phe Met Ile Thr Phe Phe Arg Arg Ala Gly Leu Gly
            20
                                                     30
Thr Lys Leu Ser Leu Leu Thr Gly Ala Ser Val Ala Thr Leu Phe Leu
        35
                            40
Leu Phe Thr Phe Leu Leu Ser His Asn Ala Ser Gln Gln Leu Glu Asp
                        55
Leu Ala Val Glu Asp Leu His Asn Gln Ser Thr Gly Met Val Asp Met
                    70
                                         75
Val Glu Met Phe Asn Thr Ser Leu Ser Glu Glu Val Glu Ser Tyr Thr
                                    90
Arg Leu Phe Thr Thr Phe Leu Pro Gln Pro Leu Asn Ser Asp Ser Ser
Gln Ser Arg Thr Ile Asn Gly Leu Thr Val Pro Leu Leu Lys Gly Gly
                            120
Glu Thr Glu Leu His Glu Asn Asn Thr Leu Ser Asp Asp Phe Leu Ser
                        135
Arg Thr Gly Ala Ile Ser Thr Leu Phe Val Arg Ser Gly Asn Asp Phe
                    150
                                        155
Ile Arg Val Ala Thr Ser Leu Arg Lys Glu Asn Gly Asp Arg Ala Ile
                                    170
                165
Gly Thr Val Leu Asp Thr Thr Ser Pro Ala Phe Ala Ala Val Thr Lys
            180
                                185
                                                    190
Gly Glu Val Tyr Arg Gly Leu Ala Pro Leu Phe Gly Asn Arg Tyr Gln
                            200
Gln Pro Gln Glu Arg Val Cys Pro Lys
                        215
<210> 10512
<211> 81
<212> PRT
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## <213> Enterobacter cloacae

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<210> 10513
<211> 196
<212> PRT
<213> Enterobacter cloacae
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<400> 10513 Gly Ser Lys Arg Ser Met Pro Met Lys Thr Gln Arg Val Ile Lys Val 10 Ala Thr Phe Leu Ala Phe Cys Leu Pro Gly Leu Thr Leu Ala Glu Asp 20 25 Cys Gln Ile Thr Leu Ser Gln Pro Ile Val Asp Tyr Lys Gln Leu Lys 40 Arg Asp Asp Ile Val Thr Ser Gln Gln Ser Trp His Lys Leu Pro Glu 55 Arg Glu Val Thr Val Asn Val Phe Cys Pro Asp Lys Gln Lys Leu Ala 70 75 Val Leu Leu Gln Gly Asn Ala Gly Glu Lys Gly Arg Phe Arg Phe Gly 90 85 Gln Asn Gly Gly Val Ala Val Lys Ile Asp Asp Met Asn Val Asp Gly 100 105 Lys Ser Tyr Thr Val Gly Lys Thr Val Asp Gln Leu Asn Phe Thr Pro 115 120 Glu Ser Gly Ser Pro Ser Pro Phe Tyr Leu Arg Asn Asn Glu Ala Val 135 140 Val Ala Val Glu Asn Asn Gln Ala Val Thr Gly Gln Gln Met Thr Phe 150 155 Thr Ala Thr Ile Phe Pro Val Leu Asn Glu Ser Ala Phe Ser Asn Asn 165 170 Ala Asp Gln Thr Thr Leu Glu Ser Asp Phe Ser Trp Lys Ile Leu Gln 185 190

<210> 10514 <211> 74 <212> PRT

Asn Asn Pro

195

<213> Enterobacter cloacae

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Phe Ser Lys Lys Arg Pro Gly Ile Asn Leu Thr Val Lys Ile Lys
                        55
Ile Glu Leu Ala Leu Phe Tyr Asn Ala
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<210> 10515
<211> 95
<212> PRT
<213> Enterobacter cloacae
<400> 10515
Arg Leu Thr Gly Gly Ile Glu Gly Ile Glu Asn Phe Asn Gly Met Arg
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Gln Glu Leu Phe Ala His Glu Arg Lys Leu Ser Pro Gln Thr Ala Ala
            20
                                25
Ile Glu Gln Ala Gly Ser Gly Lys Leu Phe Gln Phe Val Gln Arg Phe
                                                45
                            40
Gly Glu Cys Arg Leu Thr Glu Val Lys Gly Phe Ser Arg Ser Pro Gln
Arg Ser Leu Leu Ser Asp Gly His Lys Ser Met Gln Met Ala Gln Ala
                    70
Tyr Ala Leu Thr Glu Gln Thr Ile Phe Phe His Arg Arg Cys
                                    90
<210> 10516
<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 10516
Arg Gln Asn Ala Ser Leu Val Glu Glu Ala Ser Ala Ala Ala Ser
Leu Glu Glu Gln Gly Ala Arg Leu Thr Glu Ala Val Gly Ala Phe Arg
Leu Asn Gly Ala Arg Ala Gly Arg Ala Pro Ala Ala Ala Asn Ala Ala
                            40
Lys Pro Ser Pro Leu Thr Pro Ala Ala Val Val Ser Gly Asp Asn Trp
   50
Glu Thr Phe
<210> 10517
<211> 89
<212> PRT
<213> Enterobacter cloacae
<400> 10517
Trp Ala Ala Phe Asp Ala Val Tyr Asp Leu Ile Gly Gly Glu Ile Lys
                                    10
Lys Phe Phe Ile Leu Pro Pro Leu Met Asp Ala Val Val Thr Pro Ser
            20
                                25
Cys Lys Gln Pro Gln Cys Val Asp Leu Lys Lys Ile Lys Ser Gly Gln
                                                45
                            40
Leu Lys Lys His Val Leu Pro Leu Leu Gln Val His Asn His Met Leu
                        55
Thr Glu Phe Leu Val Glu Thr Phe Arg Trp Val Lys Leu Leu Val Ser
                    70
Thr Trp Val Leu Pro Thr Leu Val
                85
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<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 10518
Ser Ala Ser Lys Glu Glu Glu Lys Gln Ser Lys Lys Glu Gly Ser
Ser Asp Glu Lys Glu Lys Lys Ala Glu Arg Glu Lys Glu Lys Glu Lys
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Asp Thr Gln Lys Glu Lys Ser Glu Gly Glu Glu Ala Ala Asp Pro Asp
                            40
Asn Pro Glu Lys Glu Glu Arg Glu Glu Glu Thr Ala Lys Asp Thr Glu
Ser Gln Val
65
<210> 10519
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 10519
Val Asn Gln His His Glu Leu Gln Lys Ser Asp Pro Gln Thr Lys Asp
Lys Lys Glu Arg Glu Glu Ala Val Pro Asn Leu Tyr Lys Glu Thr Ile
Lys Ala Lys Gln Pro Gly Lys Glu Glu Lys Ala Asn Arg Glu Asp Pro
        35
                            40
Lys Ile Gln Gln Thr Ile Arg Glu Gly Ser Leu Glu Gly Lys Arg Lys
                                            60
Glu Arg Asp Lys Asp Asp Gln Arg Lys Ile Gln Ile Gly Asp Asn Cys
                    70
Val Phe Ser His Lys Ala Val Trp Gln Gly Tyr Leu Cys
                85
<210> 10520
<211> 209
<212> PRT
<213> Enterobacter cloacae
<400> 10520
Leu Ser Val Val Ser Asn Arg Gly Gly Arg Ser Gly Gly Leu Lys Gly
                                    10
Phe Gly Ile Met Ser Leu Ser Ser Leu Tyr Ser Ser Ser Asp Ala Glu
Tyr Ile Gln Val Asn Gln Tyr Leu Val Phe Val Pro Asn Pro Lys Lys
Leu Pro Tyr Asn Asp Glu Ser Leu Val Arg Glu Gly Ala Lys Tyr Val
                        55
Phe Glu His Thr Lys Ala Thr Gln Ala Ser Phe Gly Tyr Asn Pro Glu
                    70
                                        75
Lys Gln Lys Ala Ala Leu Ala Thr Cys Lys Ile Asp Met Ala Val Val
                                    90
Asn Lys Trp Ser Thr Cys Asp Leu Pro Ser Lys Pro Asp Ala Asp Val
            100
                                105
Phe Pro Thr Asp Ser Met Tyr Ser Phe Gln Ala Ile Arg Pro Ala Thr
                            120
                                                 125
Gly Thr Glu Ile Pro Glu Leu Asn Leu Pro Ala Gly Asp Tyr Ala Val
                                            140
                        135
Ile Arg Tyr Val Phe Ile Pro Phe Lys Gly Asn Glu Thr Ser Ala Asp
                                        155
                    150
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<210> 10521 <211> 150 <212> PRT <213> Enterobacter cloacae

<400> 10521

Phe Gln Leu Ala Asn Thr Val Asp Pro Asp Gly Asp Ile Ser Pro Ser 10 Glu Gly Ile Ser Arg Tyr Leu Thr Glu Asp Arg Pro Met His Ala Asp 20 25 Val Cys Thr Leu Lys Thr Pro Leu Asp Thr Leu Ser Trp Leu Cys Leu 40 Leu Glu Ser Glu Leu Leu Ser Ile Arg Ala Phe Gln Arg Leu Asp Leu 55 His Thr Glu Arg Asp Glu Pro Asn Glu Leu Thr Tyr Leu Glu Asp Ala 70 Ile Ile Asn Ala Gly Thr Ala Tyr Gly Trp Phe Val Cys Phe Leu Arg 85 90 Asp Gly Asp Ile Pro Pro Leu Pro Ala Thr Ala Arg Glu Ile Leu Cys 100 105 Thr Leu Asp Ser Leu Gly Lys Glu Ile Asn Arg Pro Phe Trp Glu Lys 115 120 Ala Val Ala Arg Gly Gln Asp Glu Ala Cys Gly Asp Lys Ala Ile Ala 130 135 140 Ala Leu Glu Met Met

145 150

<210> 10522 <211> 227 <212> PRT

<213> Enterobacter cloacae

<400> 10522

Ile Pro Leu Phe Phe Phe Ala Glu Asp Leu Ser Met Lys Asp Leu Ser Ser Ser Pro Ala Ser Met Ser Val Val Tyr Thr Ile Glu His Val Ser Thr Val Pro Leu Arg His Trp His Ala Phe Val Leu Ala Val Thr Glu Thr Phe Trp Gln Leu Pro Val Arg Leu Arg Pro Gly Asn Met Tyr Leu Pro Ser Leu Asn Arg Ala Ala Asp Leu Phe Pro Val Ala Asp Val Met Ala Phe Cys Gly Asp Ser Gly Gly Ser Phe Trp Pro Val Asn Met Thr 90 85 Ile Glu Arg Glu Arg Ser Asn Asn Thr Leu Ser Ile Gln Glu Leu Asp 100 105 110 Phe Gln His Gln Pro Cys Asp Phe Phe Ala Arg Val Val Met Val Leu 120 125 Leu His Asn Leu Cys Pro Gly Ser Phe Arg Ile His Ser Ser Asp Glu 135 140 Gly Arg Ser Trp Ala Ile Pro Leu Arg Trp Ile Glu Arg His Ile Gly

150 155 145 Leu Pro Glu Gln Ser Ser Leu Thr Thr Pro Gln Pro Val Leu Gln Thr 165 170 Pro Val Ser Glu Gly Ala Phe Asp Ser Leu Leu Gln Leu Leu Ser 185 180 Gly Gly Glu Arg Val Leu Ser Ser Glu Asp Trp Asn Ala Phe Val Leu 200 205 Ala Glu Phe His Leu Tyr Glu Leu Lys Arg Val Thr Glu Arg Thr Asp 210 215 Ala Pro 225 <210> 10523 <211> 336 <212> PRT <213> Enterobacter cloacae <400> 10523 Leu Ser Pro Ser Arg Glu Asp Thr Ala Pro His Gly Ala Val Ser Ser 10 Phe Phe Tyr Glu Arg Gly Val Phe Thr Met Ser Glu Trp Cys His Asn 20 25 Arg Leu Glu Ile Thr Gly Lys Pro Val Cys Ile Asp Val Met Leu Gln 35 40 Trp Ile Asn Gly Thr Asp Ala Pro Arg His Arg His Ala Val Gln Gln 55 Ser Ile Gln Leu Phe Leu Ala Gly Ala Ala Gly Ile Leu Lys Pro Val 70 75 Arg Thr Thr Ser Tyr Pro Pro Phe Gln Gly Leu Val Arg Ala Gly Thr 8.5 90 Gly Leu Ser Thr Ala Ala Asn Gln Ala Phe Glu Asn Trp Leu Ala Leu 100 105 110 Leu Leu Thr Asp Ala Val Leu Asp Ala Glu Thr Ile Arg Val Ile Asp 120 125 Arg Leu Tyr His Gln Ser Gly Leu Gly Ala Leu Lys Trp Glu Asn Ile 135 140 Pro Val Ser Ser Arg Asp Val Met Ala Glu Leu Ile Ile Arg Gln Tyr . 150 155 Thr Asp Trp Phe Gly Leu Val Ser Ala Gly Asp Glu Ser Asp Ala Ala 165 170 Ala Ala Trp Glu Arg Leu Ser Gln Tyr Pro Glu Arg Ser Gln Pro Cys 180 185 Asp Met Leu Ala Val Ile Pro Ser Arg Leu Ala Ala Glu Leu Asn Gly 200 Ala Gly Gly Leu Met Ser Gly Val Ser Thr Thr Thr Ser Leu Tyr Cys 215 Arg Gln Tyr Gly Met Glu Trp Pro Ala Gly His Asn Val Ser Trp Gln 230 Arg His Thr Pro Asn Ser Leu Thr Leu Gln Met Asp Thr Pro Trp Leu 250 Pro Pro Ser Gly Glu Val Val Gly Glu Ile Ser Ala Val Phe Asp Cys 260 265 Glu Val Arg His Ser Tyr Ser Glu Pro Val Ser Gly Leu Ser Gly Tyr 280 275 285 Asp Cys Tyr Asp Gly Gly Glu His Val Asp Gly His Lys Gly Ala Ser 295 300 Gly Ala Pro Gln Pro Gly Gln Val Leu Tyr Leu Val Ser Asp Glu Pro 310 315 Asp Ser Pro Ala Gln Asp Ala Thr Ser Tyr Arg Glu Val Arg Gly

330

325

<210> 10524

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<211> 76
<212> PRT
<213> Enterobacter cloacae
<400> 10524
Trp Leu Gln Lys Gln His Ile Ser Leu Leu Ile Phe Arg Ala Asn Gly
                                    10
Ala Tyr Val Asn Cys Gly Ile Lys Trp Val Thr His Ser Met Leu Arg
                                25
Ala Val Asn Asn Met Met Leu Asp Met Pro Ala Ala Ile Ala Arg Lys
                            40
Tyr Tyr Gln Asp Arg Leu Met Arg Gln Ile Lys Arg Lys Lys Glu Lys
                        55
Asp Arg Glu Arg Leu Ala His Lys Glu Lys Ile
<210> 10525
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 10525
Phe Lys Ile Leu Ser Arg Arg Asn Tyr Leu Gln Ser Met Ile Pro Arg
Arg Thr Leu Lys Ala His Phe Leu Pro Trp Gly Ser Ala Ile Asp Asp
            20
Thr Pro Ser Pro Ala Arg Tyr Pro Leu Ser Arg Ala Ala Arg Asn Gly
                            40
Met Ile Lys Tyr Cys Ala Asn Leu Ile Ser Pro Gly Val Tyr Pro Asp
                        55
                                             60
Phe Cys
65
<210> 10526
<211> 397
<212> PRT
<213> Enterobacter cloacae
<400> 10526
His Ala Phe Val His Val Gln Gln Leu Lys Arg Ser Arg Arg Met Ser
Arg Arg Gly Glu Arg Phe Ser Arg Met His Leu Pro Leu Pro Gln Leu
                                25
Asn His Ile Arg Ala Cys Gly Ala Cys Gln Gln Ser Gly Val Thr Ala
Leu Cys Ala Leu Pro Gln Asn Arg Asp Arg Leu Phe Pro Asn Asn Val
Tyr Leu Arg Leu Ala Gly Asp Val Asn Asp Ile Cys His Arg Asp Ala
                    70
                                        75
Lys Arg Gly Gly Gln Phe Thr Gln Asn Gly Asn Ala Gly Val Gly Ser
                                    90
                85
Pro Phe Phe Asp Leu Tyr Gln His Ala Phe Ala Asp Ala Gly Ala Ala
                                105
                                                     110
Arg Lys Leu Val Gln Arg Gln Phe Phe Leu Phe Pro Pro Ala Ala Asp
                            120
                                                 125
Thr Val Arg Asp Gly Gln Ala Tyr Leu Gly Asn Ile Gly Thr Arg Ile
                        135
                                            140
Gly His Tyr Ile Asp Phe Ile Ser His Trp Ser Leu Pro Trp Tyr Lys
                                        155
                    150
Thr Val Asn Thr Gly Leu Phe Met Ser Leu Val Thr Pro Ser Ile Asp
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165
                                    170
                                                         175
Ser Arg Leu Val Gly Ile Ala Pro Gly Phe Arg Ala Leu Ser Ile Leu
                               185
Val Glu Ala Ala Pro Ile Thr Gln Pro Glu Val Ala Pro Ala Ala Leu
                            200
Ala Gln Ala Cys Gln Gln Met Leu Asn Asp Asp Val Pro Trp Ala Glu
                        215
                                            220
Asn His Leu Ala Ala Trp Asp Glu Val Phe Lys Ala Phe Gly Ala Lys
                    230
                                        235
Pro Lys Arg Thr Pro Cys Ser Ala Ser Ala Leu Arg Lys Arg Val Met
                                    250
                245
Arg Asp Gly Ser Leu Pro Pro Leu Asp Pro Val Val Asp Ile Tyr Asn
            260
                                265
Ala Ile Ser Ile Arg Tyr Ala Ile Pro Val Gly Gly Glu Asn Leu Ala
                            280
                                                 285
        275
Ala Tyr Ser Gly Ala Pro Arg Leu Thr Leu Ala Asp Gly Ser Glu Pro
                        295
                                             300
Phe Asp Thr Val Lys Glu Gly Glu Pro Val Val Glu Asn Pro Glu Pro
                    310
                                        315
Gly Glu Val Ile Trp Arg Asp Asp Leu Gly Ile Thr Cys Arg Arg Trp
                                    330
                325
Asn Trp Arg Gln Gly Ile Arg Thr Arg Leu Asp Ser Gln Ala Gln Ser
            340
                                345
                                                     350
Met Trp Phe Ile Leu Glu Ser Leu Pro Ser Met Pro Leu Ala Ala Leu
                            360
                                                 365
Gln Glu Ala Gly Asp Glu Leu Val Ser Asn Leu Gln Lys Leu Met Pro
                        375
                                             380
Gly Ala Thr Ala Arg Ile Gln Leu Leu Glu Leu Ala
                    390
<210> 10527
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 10527
Gln Pro Ala Ser Arg Leu Pro Ala Ile Pro Glu Ile Arg His Phe Val
Arg His Leu Ser Val Ser Asn Val Ser Trp Gln Ile Ala Val Pro Asn
            20
                                25
Asn Arg Thr Ala Leu Ser Ala Val Phe Phe Thr Ser His Arg Ile Leu
                            40
Leu Gln Val Asn Arg Leu Phe Leu His His Tyr His Pro Val Asn Gly
Ser Ala Arg Thr Leu Thr His Gly
<210> 10528
<211> 133
<212> PRT
<213> Enterobacter cloacae
<400> 10528
Gly Ala Leu Ile Phe Ile Gly Gln Ile Met Pro His Thr Ser Ser Trp
                                    10
Trp Gly Leu Met Leu Glu Leu Tyr Arg Ser His Lys Thr Ser Phe Asp
                                25
Ile Phe Leu Leu Ile Val Leu Gly Val Ile Val Arg Val Phe Tyr Trp
                            40
                                                 45
Gly Gly Lys Leu Arg Glu Cys Cys Gly Asp Ile Leu Ile Gly Thr Val
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55

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<210> 10529

<211> 172

<212> PRT

<213> Enterobacter cloacae

<400> 10529

Pro Ala His Ala Gly Phe Phe Met Glu Gln Thr Met Thr Asp Arg Cys 10 Lys Trp Val Ala Thr Ala Arg Lys Tyr Ile Gly Glu Ala Glu Val His 25 20 Gly Pro Lys His Asn Pro Leu Ile Leu Gln Met Trp Arg Asp Ile Lys 35 40 45 Arg Gly Gly Ile Lys Asp Asp Glu Thr Pro Trp Cys Ala Ala Phe Val 55 60 Gly Ser Val Leu Glu Gln Asn Gly Ile Gln Ser Thr Arg Phe Glu Ser Ala Arg Ser Tyr Leu Asp Trp Gly Ile Glu Leu Gln Glu Pro Thr Tyr 85 Gly Cys Val Ala Val Leu Thr Arg Asp Gly Gly His Val Gly Phe 100 105 Val Val Gly Gln Asn Lys Ala Gly Asp Leu Met Ile Leu Gly Gly Asn 120 Gln Ser Asp Ala Val Asn Ile Lys Ala Phe Ser Arg Gln Arg Val Thr 135 140 Ser Tyr Arg Trp Pro Arg Gly Gln Ser Ser Val Pro Gln Ser Leu Pro 150 Val Met Ser Ala Glu His Ser Thr Ser Glu Ala

<210> 10530

<211> 128

<212> PRT

<213> Enterobacter cloacae

165

<400> 10530

Ser Gly Arg Gly Arg Val Ala His Arg Cys Lys Ser Arg Leu Arg Ala 10 Met Ser Cys Tyr Asp Asp Asp Leu Asn Ala Gly Asp Glu Gln Met Leu 25 Glu Ala Phe Gly Arg Pro Val Arg Leu Pro Asn Arg Ala Asp Pro Ile 40 45 Ile Ala Ile Phe Asn Glu Pro Tyr Ala Arg Thr Asp Leu Pro Ser Ser 55 60 Gly Gly Gly Phe Ile Thr Gly Thr Val Thr Ser Ile Thr Val Lys Ser 70 75 Gly Ser Val Asp Gly Ile Ala Arg Arg Asp Val Ile Gln Gly Thr Lys 8.5 90 Lys Ala Arg Asn Trp Asp Glu Lys Arg Lys Pro Trp Phe Trp Gly Gln 105 Leu Glu Leu Asn Tyr Phe Leu Glu Ser Ser Pro Cys Pro Asp Gly Ser

<210> 10531

<400> 10532

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<211> 324
<212> PRT
<213> Enterobacter cloacae
<400> 10531
Thr Ala Gly Asn Asn Phe Leu Phe His Leu Gly Tyr Thr Gln Met Gln
Val Lys Ser Leu Gly Phe Ser Ile Thr Asn Asp Asn Glu Asn Ile Lys
                                25
Thr Ile Asp Val Met Asn Glu Phe Ile Lys Ser Ser Ser Arg Gln Tyr
Asn Arg Ala Asp Tyr Thr Arg Arg Phe Leu Met Ser Asp Val Asn Asp
                        55
Phe Tyr Tyr Gly Leu Val Val Thr Phe Lys Asn Gln Lys Lys Asn Cys
                    70
Met Ser Gln Phe Ile Asp Gly Lys Phe Lys Leu Lys Val Glu Glu Leu
                                    90
Gln Gly Asp Glu Lys Leu Val Thr Phe Asn Leu Phe Leu Leu Asn Lys
            100
                                105
Thr Asn Leu Arg Gly Leu Tyr Met Ser His His Gly Ser Cys Ser Leu
                            120
Asn Thr Leu Phe Ser His Phe Gln Thr Val Ser Asn Glu Phe Ile Arg
                        135
                                            140
Lys Gln Asn Ala Ala Asp Ile Glu Lys Leu Gly Asp Asn Pro Lys Gln
                    150
                                        155
Lys Glu Val Thr Ala Val Asn Lys Lys Tyr Lys Lys Arg Phe Ser Phe
                165
                                    170
Ser Ile Met Thr Thr Lys Glu Asp Ile Lys Ser Ile Leu Gly Gln Phe
                                185
Lys Glu Ile Lys Lys Ala Ser Phe Lys Phe Asp Tyr Ile Asp Phe Lys
                            200
Gly Gly Ala Leu Thr Pro Leu Glu Ala Phe Ala Asn Ser Thr Thr Ile
                        215
Asp Met Ser Ile Asn Pro Asp Asp Lys Tyr Lys Val Gly Ala Leu Ser
                    230
                                        235
Gln Thr Met Ser Asp Thr Phe Glu Ala Met Lys Gly Gly Ile Ser Lys
                245
                                    250
Ala Arg Val Thr Ala Val Asp His Gly Gly Ile Glu Lys Ile Ile Asp
            260
                                265
Phe Met Asp Cys Pro Ala Phe Phe Glu Ser Tyr Asp Phe Asp Val Ile
                            280
                                                 285
Ala Glu Lys Ile Asn Gly Leu Thr Asn Asp Asn Tyr Thr Ser Asn Pro
                        295
                                            300
Val Phe Asp Met Ile Lys Asp Glu Ile Leu Asn Gly Thr Asn Lys Asn
                    310
                                        315
Ala Phe Val
<210> 10532
<211> 99
<212> PRT
<213> Enterobacter cloacae
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Met Asn Ala Asp Ile Tyr Ile Tyr Leu Leu Arg Arg Ser Lys Met Ala

Asp Ala Ala Phe Thr Leu Pro Lys Gly Val Tyr Gln Lys His Lys Glu 20 25 30

10

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<210> 10533 <211> 79 <212> PRT <213> Enterobacter cloacae

<400> 10533

Glu Ile Lys Leu Cys Arg Leu Tyr Cys Ser Leu Arg Tyr Ile Asp Leu 1 5 10 15

Gly Asn Thr Gly Ile Phe Ile Arg Ser Cys Ile Val Ile Ile Phe Thr 20 25 30

Gly Asn Ser Pro Ile Ile Asp Gln Ser Ala Asp Thr Phe Lys Ile Ala 35 40 45

Ile Cys Leu Lys Arg Leu Ser Leu Ser Leu Ala Lys Leu Arg Leu Ser 50

Ala Ile Lys Ser Tyr Leu Lys Trp Ser Arg Ile Asn Leu Lys 75

<210> 10534 <211> 95 <212> PRT <213> Enterobacter cloacae

<400> 10534 Ser Ser Cys Ile Thr Asn Ser Ala His Ser Leu Pro Lys Cys Tyr Ser 10 Val Ile Leu Lys Leu Val Leu Lys Asp Ile Val Ser Gly Lys Thr Phe 20 25 Gly Glu Phe Val Lys Pro Leu Asn Lys Leu Ala His Lys Leu Phe Pro 40 45 Lys Asn Ser Gly Gln Lys Leu Pro Ser Leu Lys Gly Lys Pro Ser Pro 55 60 Asp Arg Lys Val Lys Gly His Ile Ile Tyr Phe Phe Ser Ile Ile Thr 70 75 Lys Ile Ile Tyr Phe Ile Phe Tyr Ser Phe Ile Lys Glu Ser

<210> 10535 <211> 67 <212> PRT <213> Enterobacter cloacae

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Lys Lys
65
<210> 10536
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 10536
Arg Leu Asp Pro Met Arg Ser Phe Ala Ser Pro Leu Asn Thr Asn Ile
Ala Tyr Ala Lys Lys Ile Ile Trp Gln Ser Phe Ile Pro Gln Thr Phe
                                25
Ala Glu Val Arg Val Île Tyr Met Ser Phe Asp Gln Gly Ile Leu Ser
                            40
Glu Ile Glu Cys Leu Asn Arg Thr Glu Ser Ser Asp Asp Gln
<210> 10537
<211> 155
<212> PRT
<213> Enterobacter cloacae
<400> 10537
Lys Gln Arg Gly Arg Lys Leu Met Arg Gly Lys Glu Leu Asp Thr Gln
                                    10
Ile Glu His Glu Leu Gln Leu Met Leu Ile Glu Gly Phe Asp Lys Ser
            20
                                25
Pro Ile Ser Ala Ile Asn Leu His Ala Arg Leu Lys Ser Lys Gly Ile
                            40
Ile Asn Gly Gly Leu Ser Thr Leu Ser Asn Ile Glu Arg Arg Leu
Ile Ala Ala Tyr Val Asp Gln Gln Leu Ser Pro Leu Asn Leu Arg Pro
                    70
Lys Glu Lys Gln Gln Tyr Val Asn Arg Lys Thr Arg Gln Ala Leu Leu
                                    90
Gly Arg Asn Gln Gln Leu Gln Glu Glu Asn Lys Glu Leu Arg Glu Gln
                                105
Leu Ala Gln Asn Thr Leu Ser Leu Ile Glu Ile Val Lys Ala Val Lys
                            120
Ile Asn Thr Val Ile Pro Val Glu Ser Leu Leu Ala Pro His Leu Ile
                        135
Met Glu Leu His Lys Arg Lys Lys Asp Gln
                    150
                                        155
<210> 10538
<211> 414
<212> PRT
<213> Enterobacter cloacae
<400> 10538
Val Ile Leu Asn Asp Ser Glu Val Ser Val Lys Pro Val Ala Ile Gln
                                    10
Tyr Ile Glu Asp Asp Ile Leu Asp Ala Arg Ala Phe Tyr Ser Ile Leu
                                25
Phe Gly Leu Lys Ile Leu Cys Cys Glu Glu Phe Pro Gly Phe Thr Leu
                            40
Glu Asp Tyr Glu Asp Leu Glu Phe Ile Pro Arg Pro Asn Ala Phe Asn
                        55
Trp Glu Ile Tyr Gln Asp Ile Asp Asn Ile Leu Glu Pro Leu Glu Lys
                    70
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Ser Met Ile Thr Lys Gly Leu Phe Glu Ile Ala Thr Gly Leu Ala Arg
                85
                                    90
Gly Lys Thr Tyr Asp Ile Lys Glu Leu Lys His Thr Ala Val Leu Ala
                                105
Leu Ser Tyr Ala Thr Gly Ala Arg Pro Val Gln Leu Ala Lys Leu Ser
                            120
Val Arg Asp Leu Arg Ile Asp Thr Cys Asp Thr His Thr Gly Leu Ile
                        135
Arq Tyr Ser Ile Leu Leu Pro Tyr Val Lys Gln Arg Arg Leu Thr Thr
                    150
                                        155
Glu Arg Leu Leu Ala Ile Pro Pro Glu Ile Gly Ala Leu Ile Lys
                                    170
                165
His Tyr Val Asp Lys Ala Gln Leu Leu Ser His Asp Arg Met Phe Glu
                                185
            180
Met Gly Val Ser Ala Pro Ala Phe Val Ser Gln Ser Ile Ser Gln Ala
                            200
        195
Ile Leu Asn Phe Ser Pro Pro Glu Tyr Gln Thr Ala Val Gly Arg Gly
                                            220
                        215
Glu Ala Ala Pro Pro Ser Ile Thr Ser Thr Asp Leu Arg His Asn Val
                    230
                                        235
Gly His Ser Leu Ala Met Gln Gly Ala Ser Ala Glu Glu Ile Ala His
                                    250
Ile Leu Gly His Ser Ser Leu Val Val Ala Lys His Tyr Ile Arg Ala
                                265
Thr Pro Ala Leu Ala Leu Ile Arg Ala Lys Ala Leu Gly Ser Asn Pro
                            280
                                                285
Val Trp Gln Asn Met Val Ala Met Met Leu Thr Gly Lys Leu Val Pro
                        295
                                            300
Ser Lys Glu Trp Glu Gly Arg Arg Val Val Gly Met Val Gly Asp Arg
                    310
                                        315
Leu His Tyr Glu Ile Gly Gly Cys Ala Arg Thr Asp Asp Glu Cys Pro
                                    330
Phe Cys Glu Val Arg Cys Cys Tyr Gly Cys Leu Tyr Tyr Arg Pro Phe
                                345
Leu Asp Gly His His Gln Gly Val Leu Asn Ser Val Ser Lys Glu Val
                            360
Asp Glu Leu Ile Ala Val Ser Asp Ser Val Gly Asn Ala Leu Asn Pro
                                             380
                        375
Leu Ile Ser Val His Glu Thr Thr Gln Ile Glu Ile Lys Ser Val Ile
                    390
Ala Arg Cys His Leu His Asn Val Arg Gly Cys Gly Lys
                405
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<210> 10539

<211> 87

<212> PRT

<213> Enterobacter cloacae

<400> 10539

Arg Ala Leu Ser Lys Lys Gln His Lys Val Ser Thr Arg Ser Leu Phe 10 Asp Thr Arg Thr Gln Val Arg Leu Gln Leu Ser Arg Ser Val His Lys 25 Thr Leu Ala Ser Ala Lys Glu Ile Leu Gln Gly Arg Gly Val Asp Ser 40 Val Ser Ile Glu Asp Leu Val Arg Ala Cys Leu Glu Glu Asn Gln Pro 55 60 Ile Asp Leu Ala Ser Leu Tyr Leu Glu Asn Leu Leu Lys Gln Lys Gly 70 75 Thr Ser Ile Cys Asp Phe

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<210> 10540
<211> 151
<212> PRT
<213> Enterobacter cloacae
<400> 10540
Trp Trp Ile Val Phe Cys Phe Thr Ile Pro Asn Leu Arg Lys Lys Gln
                                    10
Lys Thr Lys Leu Leu Trp Leu Ser Leu Asn Leu Asn Arg Leu Lys Glu
                                25
Lys Gly Val Lys Met Glu Leu Gly Ile Met Val Cys Ile Val Leu Leu
                            40
Leu Ser Val Ala Ala Ala Trp Ile Ser Asn Lys Thr Val Asp Leu Leu
Glu Arg Phe Tyr Phe Lys Arg Pro Leu Ser Met Glu Tyr Ala Ala Trp
                                        75
Leu Arg Val Met Cys Ala Gly Leu Leu Val Phe Ile Gln Val Ala
                85
Pro Gln Phe Thr Leu Leu Tyr Thr Leu Lys Leu Val Thr Leu Ile Asn
                                105
            100
Leu Gly Ile Gln Thr Met Lys Leu Asn Gly Val Tyr Lys Tyr Lys Arg
                            120
Thr Gly Ile Leu Pro Pro Gly Gly Ala Leu Ser Asn Leu Thr Arg Leu
                        135
Asn Pro Phe Lys Lys
<210> 10541
<211> 180
<212> PRT
<213> Enterobacter cloacae
<400> 10541
Asn Met Ser Thr Gln Lys Gln Leu Ser Arg Thr Thr Gly Thr Glu Arg
Met Phe Lys Glu Glu Leu Ala Leu Ser Leu Ile Cys Trp Val Phe Thr
           20
                                25
Ser Pro Phe Thr Asn Trp Thr Asp Lys Val Phe Ser Gly Ile Glu Val
                            40
Pro Ser Glu Gly Pro Ser Ser Leu Arg Gly Glu Thr Glu Lys Phe Phe
Arg Phe Val Val Asn Glu Glu Gly Tyr Asp Ala Gly Arg Ala Ala Ile
                    70
Gly Leu Asp Leu Cys Cys Phe Ser Leu Pro Leu Cys Leu Phe Pro Asp
                                    90
Ala Ala Leu Ser Glu Glu Glu Val Met Ser Lys Leu Thr Gly Glu Val
                                105
                                                     110
Ile His Gly Ile Leu Leu Ser Leu Pro Glu Phe Ile Asp Met Pro Glu
                            120
Val Leu Ala Tyr Gln Val Arg Asp Glu Ile Leu Ala Phe Asn Thr Arg
                        135
Cys Gly Asp Gly Ile Phe His Gly Trp Asn Thr Ala Ser Glu Leu Trp
                    150
                                        155
Lys Phe Glu Ile Phe Pro Arg Thr Thr Ile Met Met Gln His Thr Ser
                                    170
Ala Ile His
            180
<210> 10542
<211> 305
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<212> PRT
<213> Enterobacter cloacae
<400> 10542
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Gly Thr Thr Met Gln Trp Ile Ser Thr Ala Ser Gln Lys Ile Asp Glu 10 Arg Leu Tyr Arg Val Cys Val Trp Val Lys Lys Tyr His Ala Asp Ala 25 Ile Asn Arg Val Val Leu Thr Val Asp Leu Ser Lys Ala Arg His Asp Pro Asp Glu Asp Gln Val Arg Ala Glu Leu Leu Cys Gly His Tyr Phe 55 Leu Leu Arg Lys Glu Asn Ala Ser Asn Ser Ala Pro Asp Asp Gln Lys 75 Phe Ala Phe Leu Pro Asp Gly Arg Asn Leu Cys Trp Gln Thr Ala Thr Pro Val Leu Gln His Leu Leu Leu Asn Lys Asn Val Pro Glu Ser Leu 100 105 110 Arg Leu Leu Thr Asp Tyr Ile His Met Arg Leu Ala Arg Leu Thr Met 120 125 Val Pro Met Ser Gly Thr Ile Met Asn Glu Ala Leu Leu Asp Ser Ile 135 140 Ser Trp Val Lys Val Asp Leu Thr Tyr Phe Trp Gln Tyr Glu Gln Leu 150 155 Ser Ser His Leu Gly Pro Ile Gln Ile Thr His Lys Ala Leu Val Arg 165 170 Phe Gly His Leu Ala Lys Asn Asp Glu Asn Ser Ser Ala Ile Arg Ile 180 185 Leu Arg Gln Arg Leu Ser Ser Glu Phe Leu Gln Glu Phe Gln Met Ala 200 Glu Asp Glu Leu Lys Arg Lys Gln Ser Leu Met Gly Thr Met Asp Val 215 220 Lys Met Leu Phe His Ala His Tyr Pro Ser Gln Lys Met Leu Val Ala 230 235 Arg Tyr Lys Asn Gly Trp Val Met Val Asp Cys Phe Leu Phe His His 250 245 Thr Lys Pro Lys Lys Lys Ala Lys Asn Lys Thr Thr Val Ala Lys Pro 265 Gln Leu Lys Gln Thr Lys Arg Glu Gly Ser Glu Asn Gly Thr Gly His 280 Tyr Gly Val His Arg Val Val Thr Leu Ser Gly Gly Gly Val Asp Gln

305

<400> 10543

<210> 10543 <211> 188 <212> PRT <213> Enterobacter cloacae

 Cys
 Ile
 Tyr
 Phe
 Ile
 Asp
 Gly
 Tyr
 His
 Leu
 Leu
 Tyr
 Ile
 Thr
 Leu
 Asn

 1
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 10
 15
 15
 15

 Asp
 Lys
 Lys
 Lys
 Lys
 Glu
 Tyr
 Glu
 Val

 Asn
 Met
 Gln
 His
 Gln
 Asp
 Ala
 Leu
 Gln
 Arg
 Lys
 Leu
 Pro
 Glu
 Arg
 Ile

 Phe
 His
 Ala
 Val
 Cys
 Phe
 Glu
 Gly
 Ile
 Ala
 Thr
 Ala
 Ile
 Leu
 Ala
 Pro

 50
 55
 55
 60
 60
 60
 11
 15

Thr Ala Ala Trp Leu Met Gln Arg Ser Val Val Glu Met Gly Gly Leu 65 70 75 . 80

Thr Ile Ile Leu Ala Thr Thr Ala Met Leu Trp Asn Ile Ile Tyr Asn 85 90 Phe Gly Phe Asp Arg Phe Trp Pro Val Gln Arg Val Lys Arg Thr Ala 105 Lys Val Arg Ala Leu His Ala Leu Gly Phe Glu Cys Gly Phe Ile Val 120 Ile Gly Val Thr Ile Val Ala Ala Val Leu Gly Val Thr Leu Leu Gln 135 140 Ala Phe Thr Leu Glu Ile Gly Phe Phe Leu Phe Phe Leu Pro Tyr Thr 150 155 Met Leu Tyr Asn Trp Ala Tyr Asp Thr Leu Arg Glu Lys Ile Ile Lys 170 165 Arg His Gln Gln Arg Arg Ala Leu Ala Ser Glu 180

<210> 10544 <211> 101

<212> PRT

<213> Enterobacter cloacae

<400> 10544

 Pro
 Arg
 Asn
 Thr
 Phe
 Leu
 Ser
 Leu
 Cys
 Asp
 Pro
 Ile
 Glu
 Asp
 Ala

 1
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 Cys
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 Arg
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Phe Leu Ile Asn 100

<210> 10545 <211> 469 <212> PRT

<213> Enterobacter cloacae

<400> 10545

His Val Ser Ser Leu Arg Cys Trp Leu His Leu Leu Asp Ala Asn Asn 10 Met Lys Arg Lys Ile Ile Pro Val Leu Ile Gly Cys Ala Leu Ser Phe 20 25 Ser Gly Leu Ala Ala Gln Pro Thr Ala Glu Arg Tyr Ile Val Ser Phe 40 4.5 Pro Asp Gly Ser His Val Lys Tyr Ser Gly Ala Phe Ala Asp Ala Phe 55 Pro Asn Gly Leu Pro Val Gly Met Gly Ser Gly Leu Leu Phe Thr Gly 70 75 Lys Gln Gly Asp Ala Leu Thr Phe Ala Thr Val Thr Asp Arg Gly Pro 85 90 95 Asn Ala Asp Ser Pro Lys Met Gly Lys Asn Asp Ala Lys Ile Phe Val 100 105 Thr Pro Asp Phe Ala Pro Leu Leu Met Thr Ile Arg Val Gln Asn Gly 120 125 Lys Ala Glu Ala Val Asp Ala Arg Pro Leu His Asp Asp Lys Gly Glu 135 140 Ile Asn Gly Leu Pro Leu Gln Ser Gly Val Ile Gly Ser Thr Asn Glu

<211> 72

```
150
                                       155
Val Ala Leu Ser Asp Thr Leu Lys Val Leu Lys Gly Asp Asn Arg Gly
                                    170
Leu Asp Thr Glu Gly Ile Thr Pro Asp Gly Lys Asp Gly Tyr Trp Leu
                                185
Cys Asp Glu Tyr Gly Pro Phe Leu Ile Asn Val Asp Ser Lys Gly Lys
                            200
Ile Leu Ala Ile His Gly Pro Gln Ala Thr Gln Gly Glu Lys Ser Ile
                        215
                                            220
Ala Gly Gly Leu Pro Asn Val Ile Lys Trp Arg Gln Ala Asn Arg Gly
                    230
                                        235
Phe Glu Gly Leu Thr Arg Met Pro Asp Gly Arg Ile Ile Ala Ala Val
                                    250
                245
Gln Ser Thr Leu Asp Ile Asp Gly Lys Ser Lys Lys Gln Ala Leu Phe
                                265
            260
Thr Arg Leu Val Ser Phe Asp Pro Ala Thr Gly Lys Thr Ala Met Tyr
        275
                            280
                                                 285
Gly Tyr Pro Val Asp Ser Ala Ala Tyr Ser Lys Asn Ser Asp Ala Lys
    290
                        295
                                            300
Ile Gly Asp Ile Val Ala Leu Asp Asn His Thr Ile Leu Leu Ile Glu
                    310
                                        315
Gln Gly Glu Asp Lys Asn Asp Ala Met Arg Asn Leu Ile Tyr Arg Val
                325
                                    330
Asp Leu Ser Lys Ala Ser Asp Leu Ala Ala Phe Asp Lys Pro Gly Glu
            340
                                345
Tyr Pro Glu Phe Asp Asp Glu Lys Thr Leu Ala Gln Arg Gly Ile Thr
                            360
                                                 365
Leu Ala Glu Lys Thr Gln Val Val Asp Leu Arg Ala Leu Gly Trp Gln
                        375
Gln Glu Lys Ala Glu Gly Leu Ala Leu Ile Asp Ser Lys Thr Leu Ala
                    390
                                        395
Val Ala Asn Asp Asn Asp Phe Gly Val Lys Val Ala Met Gln Asn Pro
                405
                                    410
Val Glu Gly Lys Lys Leu Lys Asp Tyr Arg Val Asn Ala Glu Gly Lys
            420
                                425
Leu Thr Leu Asp Asp Lys Pro Val Glu Thr Thr Leu Ser Val Lys Pro
                            440 -
Leu Lys Lys Pro Glu Ser Asp Ser Glu Leu Trp Ile Val Thr Leu Pro
                        455
Glu Ala Leu Lys
465
<210> 10546
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 10546
Asn Ala Ala Asn Asn Lys Asn Gly Glu His His Gln Gln Tyr Phe
                                    10
Cys Lys Lys Thr Lys Leu Tyr Ile Tyr Cys Lys Arg Lys Lys Lys Lys
                                25
Arg Thr Pro Gly Lys Glu Arg Arg Pro Ser Gly Gln Leu Ile Tyr Asn
                            40
Thr Ala Thr Phe Glu Pro Asn Lys Met Asn Asn Asn Phe Leu Ser Ser
                        55
Pro Arg Gly Cys Gln Val Pro Arg
<210> 10547
```

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<212> PRT
<213> Enterobacter cloacae
<400> 10547
Pro Thr Leu Phe Leu Ser Gly Leu Glu Leu Ile Lys Tyr Lys Lys Gln
                                    10
Asn Gly Ile Asn Met Ile Phe Ser Arg Cys Ala Arg Ala Glu Ile Lys
            20
                                25
Glu Asn Met Arg Lys Arg Lys Asn Lys Lys Ala His Val Thr Ser Asn
                            40
Val Gly Leu Asn Ile Gly Gly Thr Asp Gly Thr Arg Thr Arg Asp Pro
                        55
Leu Arg Asp Arg Gln Val Phe
<210> 10548
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10548
Leu Asn Gly Ile Pro Glu Val Lys Ser Ala Leu Asn Gly Arg Lys Tyr
                                    10
Phe Ala Lys Gln Ile Val Ser Phe Arg Phe Cys Gly Glu Ile Lys Pro
            20
Val Leu Arg Tyr Ser Ser Asp Asp Lys Val Asn Asp Ser Cys Gln Lys
                            40
Ala Gly Ala Tyr Arg Glu Gln Thr Tyr Asn Glu Arg Lys
<210> 10549
<211> 87
<212> PRT
<213> Enterobacter cloacae
<400> 10549
Tyr Gly His Phe Asp Ser Leu Cys Arg Lys Tyr Asp Phe Val Leu Pro
Phe Trp Arg Cys Asp Gln Arg Ala His Cys Gly Ala Val Leu His Lys
           20
                                25
Phe Ser Leu Ile Asn Lys Leu Leu Phe Leu Val Ala Lys Cys Leu Val
                            40
Gly Asn Thr Pro Phe Thr Phe Ser Glu Leu Leu Thr Gly Ala Cys Arg
                        55
Arg Gly Pro Lys Ser Leu Val Phe Arg Ile Gly Ala Tyr Phe Arg Arg
                    70
Trp Gly Leu Leu Thr Arg Ser
<210> 10550
<211> 107
<212> PRT
<213> Enterobacter cloacae
<400> 10550
Arg Gly Ser His Cys Leu Tyr Val His Gly Phe Arg Phe Phe Thr
                                    10
Pro Leu Ala Gly Val Leu Phe Ala Phe Pro Ser Arg Tyr Trp Phe Thr
                                25
Ile Gly Gln Ser Gly Val Phe Ser Leu Gly Gly Trp Ser Pro His Ile
```

<210> 10554

```
Gln Thr Gly Tyr His Val Ser Arg Pro Thr Leu Arg Val His Ser Lys
 Cys Val Phe Val Tyr Gly Thr Ile Thr Leu Tyr Arg Arg Thr Phe Gln
                     70
                                         75
 Thr Val Pro Leu Thr His Lys Leu Ile Gln Thr Pro Gly Cys Ser Pro
                                     90
                 85
 Phe Ala Arg Arg Tyr Trp Gly Asn Leu Gly
             100
 <210> 10551
<211> 78
 <212> PRT
 <213> Enterobacter cloacae
 <400> 10551
 Pro Asp Phe Ser Ala Ile Ser Ser Thr Ser Lys Val Asp Val Ser Glu
                                     10
 Phe Ser Thr His Trp Thr Ile Ser Leu Thr Thr Leu Ser Ala Tyr Val
             20
                                 25
 Phe Val Ile Ile Cys Pro Leu Ile Thr Lys Phe Tyr Ile Tyr Leu Lys
                             40
 Lys Lys Tyr Lys Phe Phe Ile His Glu Glu Leu Ser Arg Asn Thr Ile
                         55
 Tyr Val Thr Ile Ser Asp His Leu Leu Gln Pro Glu Gly
                     70
 <210> 10552
 <211> 66
 <212> PRT
 <213> Enterobacter cloacae
 <400> 10552
 Ala Ala Val Thr Ala Met Ser Met Met Phe Ile Ser Leu Ile Ile Leu
 Ser Val Val Met Val Thr Pro Leu Met Leu Met Ile Ala Met Thr Met
                                 25
 Phe Phe Leu Thr Met Ile Met Phe Phe Ile Ser Met Thr Met Phe Met
                             40
 Ala Ala Ser Phe Met Cys Met Pro Thr Phe His Met Pro Leu Leu Ala
 Met
 65
 <210> 10553
 <211> 67
 <212> PRT
 <213> Enterobacter cloacae
 <400> 10553
 Tyr Phe Arg Ile Lys Leu Ile Asn Arg Lys Ser Ser Val Met Ala Lys
                                    10
 His Lys Ser Asn Ser Leu Val Leu Arg His His Gly Pro Arg Lys Ile
                                 25
 Ala Asn Leu Leu Thr Leu Cys Phe His Glu Asn Asp Val Ala Pro His
                             40
 Leu Leu Val Tyr Pro Asn Asp Leu Tyr His Gln Gln Ser Leu Ile Tyr
 Glu Glu
 65
```

```
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 10554
Ala Thr Arq His Phe Leu His Trp Asp Arg Leu Pro Arg Tyr His Arg
                                     10
Phe Ile Tyr Lys Thr Cys Ser Phe Thr Tyr Leu Thr Ile Asn Arg His
                                 25
Ser Leu Thr Trp Ser Asn Phe Asp Asn Val Ile Lys Asp Tyr Ile Ile
                             40
Asn Trp Asn Ile Asp Asn Asn Ala Ile Thr Gln His Met Arg Leu Phe
    50
Gly Leu
65
<210> 10555
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 10555
Ile Asn His Ser Glu Phe Met Cys Asp Lys Ile Val Trp Ser Phe Phe
                                     10
Ile Tyr Ser Val Asn Arg Phe Thr Ser Arg Glu Leu Ile Gln Pro Glu
            20
                                                     30
                                 25
Val Gly Tyr Phe Asn Gly Gly Ala Met Gly Val Leu Phe Leu Met Asn
        35
                             40
Gly Met Phe Val Lys Arg Ile Ala Asn Asn Val Arg Gly Ile
                         55
    50
<210> 10556
<211> 710
<212> PRT
<213> Enterobacter cloacae
<400> 10556
Asn Gly Asp Asn Gly Met Thr Glu Ala Lys Thr Lys Pro Tyr Ala Pro
                                     10
Arg Val Val Ser Glu Gly Asp Ile Pro Val His Lys Thr Leu Gly Glu
            20
'Val Ala Gln Thr Arg Asn Val Gly Ile Pro Arg Pro Met Pro Gly Ile
                             40
Val Ile Leu Val His Gly Val Asn Asp Val Gly Glu Ala Tyr Gln Asn
Gln Glu Lys Gly Ile Leu Ala Gly Leu Gly Lys Arg Leu Asn Arg Gln
Asp Phe Tyr Ala His Glu Trp Lys Asp Tyr Arg Ile Ile Thr Pro Gly
                                     90
                85
Arg Ser Pro Ile Ile Pro Phe Tyr Trp Gly Tyr Lys Pro Val Thr His
                                 105
                                                     110
            100
Ala Asp Tyr Arg Ala Asp Gln Lys Arg Tyr Arg Glu Glu Val Gly Lys
                                                 125
        115
                             120
Leu Ser Asp Lys Ala His Leu Pro Tyr Asp Ala Tyr Gln Glu Asp Asn
                         135
                                             140
Glu Thr Asn Lys Lys Ser Leu Gly Asn Asp Gly Lys Gly Pro Phe Gln
                    150
                                         155
Tyr Gln Asn Asp Asn Phe Lys Asn Ala Leu Asp Lys Ser Phe Ala Lys
                                     170
                165
Gly Gly Gly Thr Phe Ala Asn Ala Thr Thr Thr Ile Pro Asp Met Leu
                                 185
```

Gly Pro Gly Ala Gly Gly Phe Gly Val Ala Ala Ala Gly Phe Ala Ser 200 205 Leu His Phe Asn Asp Gly Asp Phe Thr His Pro Ile Tyr Glu Asn Pro 215 220 His Arg Ile Tyr Gln Phe Phe Ala Ala Gln Arg Leu Ala Asp Leu Ile 230 235 Ile Gln Ile Arg Gln Pro Leu Val Thr Gln Asn Asp Val Ile Asn Ile 250 245 Val Ala His Ser Gln Gly Thr Ile Ile Thr Met Leu Ala Asn Met Leu 265 Val Lys Gln Ala Gly Tyr Asp Pro Val Asn Cys Val Ile Leu Asn His 280 Ser Pro Tyr Ser Leu Glu Ser Arg Val Ala Glu Asn Ile Gln Pro Gly 295 300 Tyr Gln Gln Thr Asp Asp Ala Arg Gln Gln Thr Phe Lys Asn Phe Cys 310 315 Arg Leu Met His Thr Gln Trp Lys Gly Gly Lys Met Ala Glu Ser 325 330 Glu Leu Leu Ala Leu Glu Ala Ser Cys Thr Leu Arg Lys Pro Ser Asp 340 345 Asn Pro Leu Arg Thr Asp Gly Arg Tyr Cys Arg Ser Asn Asp Gly Lys 360 Val Tyr Asn Tyr Phe Cys Pro Asn Asp Gly Val Val Ser Leu Glu Asn 370 375 380 Val Gln Gly Phe Gly Trp Arg Gly Ile Pro Gln Asn Ile Ala Ser Asp 390 395 Ile Pro Asn Leu Phe Gln Arg Val Phe Tyr Gln His Gly Glu Val Gly 405 410 Asn Ile Pro Asp Ala Asn Pro Phe Glu Leu Pro Pro Arg Asn Glu Gly 420 425 Asp Ala Lys Tyr Ala Phe Leu Thr Asn Ala Ser Tyr Ser Ala Arg Asp 435 440 Val Val Ile Asn Gly Glu Glu Leu Pro Glu Pro Phe Ile Phe Lys Leu 455 Gln Gly Glu Asp Asn His Pro Asp Asn Asp Pro Lys Thr Ser Asp Asn 470 475 Pro Tyr Thr Tyr Tyr Val Asp Pro Asp Ser Pro Asp Ala Tyr Ile Ser 485 490 Tyr Ser Ala Lys Ala Ser Ala Ile Lys Arg Thr Val Thr Thr Thr Phe 500 505 Ala Val Asn Arg Tyr Gln Asn Ile Gly Trp Gln Pro Gly His Val Leu 520 Ser Ala Ser Glu Leu Lys Glu Glu Ser Phe Glu Arg Lys His Glu Val 535 Ile Tyr Gly Glu Val Ser Gly Ser Arg Asp Phe Gln Leu Val Thr Leu 550 555 Thr Trp Lys Lys Thr Pro Glu Glu Leu Gln Ala Glu Trp Gln Lys Ile 565 570 Asp Pro Val Gly Tyr Ser Gln His Ser Ser Ile Val Met Ser Glu Phe 580 585 Ala Pro Ser His Ala Met Ala Phe Asp Leu Ala Ile Gly Gln Cys Lys 600 605 Ser Phe Asp Tyr Gln Ala Gly Lys Phe Trp Glu Gly Leu Leu His Arg 615 620 Ala Asp Trp Arg Asp Pro Gln Asn Glu Asn Pro Tyr Ala Arg Ala Tyr 630 635 Tyr Arg Thr Gly Lys Leu Asp Glu Pro Thr Thr Lys Phe Phe Met Asn 645 650 Lys Pro Tyr Asp Val Leu Pro Lys Gly Glu Tyr Gly Val Val Asn Lys 665 Phe Asn Asn Ala Thr Thr Val Lys Pro Ser Ser Asp Leu Val Ala Gly

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680
                                                 685
Asn Gln Asp Val Ala Asn Leu Gln Trp Asp Met Pro Lys Pro Ile Ser
                        695
Asp Ser Gln Leu Ala
705
                    710
<210> 10557
<211> 237
<212> PRT
<213> Enterobacter cloacae
<400> 10557
Ser Met Lys Ile Ser Phe Met Gly Leu Met Ala Thr Ala Val Leu Leu
Ala Ile Gly Cys Gln Ala Lys Arg Thr Ala Thr Gln Val Val Tyr Arg
                                25
Phe Asp Asp His Arg Tyr Leu Glu Leu Lys Gly Trp Gly Arg Glu Gly
Glu Leu Trp Tyr Thr Asp Thr Glu Leu Gly Ile His Thr Gln Pro Val
                        55
Ser Gln Phe Tyr Lys Ile Phe Thr Lys Lys Phe Ile His Pro Ser Glu
                    70
Arg Tyr Ile Ala Ile Pro Thr Trp Gly Ser Pro Gly Thr Ile Ile Ser
                                    90
                85
Lys Asp Tyr Gly Lys Thr Trp Ser Pro Gln Phe Tyr Ser Ala Gly Ser
            100
                                105
                                                     110
Asn Glu Pro Asn Gly Asp Ser Ser Pro Pro Tyr Asp Asp Ile Ile Ser
                            120
                                                125
Phe Thr Val Val Lys Asp Gln Gly Phe Met Leu Thr Lys His Arg Leu
                        135
                                            140
Tyr Met Ser Ser Lys Pro Phe Glu Asp Pro Arg Ile Leu Pro Gly Gly
                    150
                                        155
Pro Gly Ile Ala Tyr Thr Val Asp Asp Gly Met Gly Asn Lys Val Ser
                                    170
                165
Gly Lys Leu Asp Pro Arg Ser Pro Gly Trp Ala Trp Gly Met Val Tyr
                                185
            180
Met Thr Lys Gln Gly Leu Glu Gly Ser Thr Gln Gln Leu Lys Ala Asn
        195
                            200
                                                 205
Trp Gln Asp Leu Pro Asp Ser Val Pro Glu Val Lys Gly Tyr Thr Gly
                        215
Trp Asp His Met Arg Cys Asp Met Asp Ala Gly Arg
                    230
<210> 10558
<211> 237
<212> PRT
<213> Enterobacter cloacae
<400> 10558
Leu Met Lys Gly Leu Cys Thr Val Leu Ala Ala Thr Ser Val Val Leu
Val Thr Gly Cys Leu Val Lys Glu Pro Pro Thr Gln Val Val Tyr Arg
Phe Asp Asp His Arg Tyr Leu Glu Leu Lys Gly Trp Asp Cys Glu Gly
                                                 45
Glu Leu Trp Tyr Thr Asp Thr Lys Arg Gly Ile His Thr Glu Pro Val
                        55
Ser Gln Phe Tyr Arg Leu Phe Thr Arg Lys Phe Ile His Pro Ser Glu
                    70
                                        75
Arg Tyr Ile Ala Leu Thr Gly Trp Gly Val Ser Gly Phe Ile Val Ser
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Lys Asp Tyr Gly Lys Thr Trp Arg Ser Val Ala Phe Ser Pro Asn His
           100
                                105
Asn Glu Pro Asn Gly Asp Asp Tyr Ala Pro Tyr Glu Asp Ile Ile Ser
                            120
                                                125
Phe Thr Val Val Asn Asp Gln Gly Phe Leu Gln Thr Lys His Gln Leu
                        135
                                            140
Tyr Met Ser Ser Lys Pro Phe Glu Asp Pro Arg Ile Leu Pro Gly Gly
                                        155
Pro Gly Ile Ala Tyr Thr Val Asp Asp Gly Met Gly Asn Lys Val Ser
                                    170
                165
Asp Thr Leu Asp Pro Arg Phe Pro Gly Trp Ala Trp Gly Met Val Tyr
            180
                                185
Met Thr Lys Gln Gly Leu Lys His Ser Thr Gln Gln Phe Lys Ala Asn
        195
                            200
Trp Gln Asp Leu Pro Asp Ser Val Pro Glu Val Lys Glu Tyr Thr Gly
                        215
                                            220
Trp Asp His Met Arg Cys Asp Met Asp Ala Gly Arg
                    230
<210> 10559
<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 10559
Leu Met Lys Gly Leu Cys Thr Val Leu Ala Ala Thr Ser Val Val Leu
                                    10
Ala Thr Gly Cys Gln Ala Lys Glu Pro Pro Thr Gln Val Val Tyr Arg
            20
Phe Asp Asp His Arg Tyr Leu Glu Leu Lys Gly Trp Gly Cys Asp Arg
                            40
Lys Leu Trp Phe Pro Asp Thr Lys Pro Ser Ile His Ser Glu Thr Pro
                        55
Lys Phe Val
65
<210> 10560
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10560
Lys Arg Ser Ile Phe Glu Arg Cys Val Arg Ile His Leu Pro Val Phe
Thr Phe Gln Glu Arg Gln Asn Ser Ser Ala Leu Val Met Ile Phe Pro
                                25
Pro Phe Tyr His Ser Cys Arg Lys Pro Lys Arg Gln Pro Cys Ser Lys
                            40
Phe Ala Thr Tyr Pro Glu Gly Ala Asn Gly Val Leu
   50
                        55
<210> 10561
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 10561
Lys Arg Thr Pro Arg Ser Gly Leu Pro Lys Cys Pro Cys Ala Leu Phe
               5
                                    10
Val Ser Leu Thr Lys Ser Cys Ser Lys Val Gly Tyr Gln Ile Ile Leu
                                25
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Leu Leu Tyr Arg Ser Asp Gly Ile Val Gln Pro Arg Thr Ile Pro Ser
                            40
Leu Thr Val Ile Lys Asn Lys Asp Asn Ile Gly Pro Thr Ile Tyr Leu
                        55
Asn Ile Leu Ser Leu Phe Leu Thr Pro Ile Thr Tyr Arg
<210> 10562
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 10562
Lys Ser Asn Gly Pro Leu Ser Pro Leu Phe Val Thr Ser Ser Gln Phe
                                    10
Tyr Tyr Ser Arg Pro Leu Ser Leu Leu Ser Val Val Ile Ser Leu
            20
                                25
Pro Glu Pro Cys Leu Leu Phe Ile Thr His Ile Ala Gly His Gly Ile
                            40
Asp Ile Asn Trp Leu Ala Leu Gly Val His Thr Gly Lys Thr Ala Cys
                        55
Gln Lys Ile Lys Ile Leu
<210> 10563
<211> 255
<212> PRT
<213> Enterobacter cloacae
<400> 10563
Trp Arg Cys Cys Thr Cys Gly Trp Ala Arg Thr Trp Met Tyr Val Cys
Ser Tyr Ala Leu Pro Gly Ile Cys Cys Arg Met Arg Gly Cys Pro Ala
                                25
Met Arg Asn Lys Ser Arg Arg Ser Gly Ala Arg Gln Cys Cys Val Pro
                            40
Leu Ile Arg Asn Arg Thr Glu Thr Thr Leu Ser Pro Phe Thr Leu Asp
Ala Phe Ser Ala Ser Gly Lys Thr Phe Ser Glu Gly Lys Thr Met Lys
                    70
Met Ala Ile Thr Ala Gly Lys Ala Leu Ala Ile Thr Leu Ala Thr Leu
Leu Thr Gly Cys Gly Leu Thr Gln Lys Val Thr Asp Gly Thr Val Ala
            100
                                105
Val Thr Lys Ser Ile Phe Tyr Arg Gln Val Lys Thr Leu His Leu Asp
        115
                            120
Ile Gln Ala Arg Glu Gly Val Asn Asn Asn Ala Lys Gly Ala Ser Leu
                        135
                                            140
Ala Thr Val Val Arg Ile Tyr Gln Leu Lys Glu Arg Lys Ala Phe Asp
                    150
                                        155
Ser Thr Asp Tyr Pro Ser Leu Phe Ala Ser Asp Thr Gln Ala Ile Lys
                                    170
                165
Ala Asp Leu Val Ala Glu Lys Asp Ile Arg Leu Arg Pro Gly Glu Ser
            180
                                185
                                                    190
Val Thr Leu Asp Met Pro Met Glu Glu Ser Ala Gln Val Val Ala Val
                            200
                                                205
Ala Gly Met Phe Met Ala Pro Asp Gln Val Asn Asp Thr Trp Arg Ile
                        215
                                            220
Thr Leu Thr Arg Asp Asp Leu Asp Pro Asp Lys Ala Arg Val Ile Glu
```

Val Ser Asn Asn Arg Leu Thr Leu Lys Pro Leu Glu Gly Glu

235

30

25

40

245 <210> 10564 <211> 71 <212> PRT <213> Enterobacter cloacae <400> 10564 Ile Pro Val Gly Pro Glu Pro Ile Met Ala Ile Phe Phe Ile Glu Ser Val Pro Ala Phe Leu Asn His Thr Thr Ser Val Ala Gly Glu Arg Leu 20 Ser His Ser Met Lys Gly Glu Ile Lys Thr Phe Arg Arg Gly Asp Val Ala Pro Leu Pro Glu Phe Met Gly Lys Ser Ile Gln Leu Thr Leu Leu

<210> 10565 <211> 143

<212> PRT <213> Enterobacter cloacae

Ile Arg Tyr Asn Ser Ala

<400> 10565

Ala Arg Cys Arg Lys Arg Lys Arg Lys Ala Val Ala Gly Met Lys Ile . 15 10 Tyr Arg Pro Leu Trp Glu Asp Gly Ala Phe Leu Ala Pro Gln Gln Phe 20 25 Gln Gln Gln Ala Arg Trp Asp Ala His Val Ala Asp Thr Val Ala Arg 40 Met Ala Leu Ala Asn Pro Trp Gly Val Leu Cys Ala Glu Phe Asp Glu 55 Gly Ala Leu Ala Leu Ser Arg Leu Asn Ala Thr Arg Leu Cys Val Arg 70 Phe Ala Asp Gly Thr Leu Val Asp Thr Asp Leu Ala Asp Thr Arg Leu 90 Arg Ser Gly Ser Arg Tyr Ala Ala Val Ala Ile Ser Gly Ala Ala Ala Gly Asp Asp Ala Ala Gly Thr Asp Gly Gly Asn Gly Gly Ala Gly 120 Ala Ala Ala Gly Thr Gly Tyr Ala His Ala Gly Leu Ser Pro

135

<210> 10566 <211> 220 <212> PRT

<213> Enterobacter cloacae

<400> 10566

Met Pro Pro Gly Phe Ala Cys Ala Leu Arg Met Val Arg Trp Trp Thr 10 Gln Ile Trp Arg Ile Pro Gly Cys Ala Gln Ala Ala Gly Thr Pro Leu 20 25 Ser Arg Phe Leu Ala Leu Leu Pro Val Met Met Leu Pro Gly Arg Thr 40 45 Ala Glu Gly Met Gly Ala Leu Val Arg Leu Leu Ala Pro Asp Thr Arg 55 60 Thr Gln Val Tyr His His Asp Arg Cys Arg Ile Pro Leu Lys Gln Pro 75 Val Ala Met Ser Thr Cys Gln Pro Val Ser Leu Lys His Arg Pro Val

```
85
                                    90
Met Gly Thr His Ala Thr Asp Val Asn Gly Gln Val Leu Leu Arg Leu
                               105
           100
Ser Thr Asp Asn Pro Glu Glu Ile Arg Gly Trp Leu Pro Gly Gly Asp
                           120
                                                125
Leu His Ala Asp Leu Met Ala Leu Leu His Val Trp Leu Gly Ala His
                        135
                                            140
Leu Asp Val Arg Met Gln Leu Cys Val Ala Arg His Leu Leu Pro Asp
                   150
                                        155
Ala Arg Leu Ser Cys Asn Ala Glu Gln Ile Ala Gln Val Gly Arg Thr
                165
                                    170
Ala Val Leu Arg Pro Leu Asn Pro Gln Gln Asn Arg Asn Asp Ile Ile
                                185
Thr Ile His Pro Gly Arg Phe Gln Arg Val Arg Glu Asn Ile Gln Arg
                            200
Arg Lys Asn Asp Glu Asp Gly Asp Tyr Arg Trp
                        215
<210> 10567
<211> 159
<212> PRT
<213> Enterobacter cloacae
<400> 10567
Ser Ser Asp Ala Glu Thr Ala Gly Gly Met Met Pro Arg Pro Ser
                                    10
Leu Tyr Asp Met Leu Tyr Gly Asn Phe Ala Gly Gly Leu Asp Leu His
                                25
Ser Val Ser Glu Glu Asn Gln Leu Ile Leu Ser Val Leu Asp Asn Met
        35
                                                45
Gln Arg Ile Leu Asn Cys Arg Ala Gly Thr Leu Ala His Leu Pro Asp
                        55
Tyr Gly Leu Pro Asp Met Thr Lys Ile Leu Gln Gly Met Pro Gly Thr
                    70
                                        75
Ala His Gln Leu Ile Thr Thr Leu Ser Ala Val Leu Leu Lys Tyr Glu
                85
                                    90
Pro Arg Leu Ser Arg Ile Asn Val Val Met Gln Glu Gln Ile Gln Pro
            100
                                105
                                                   110
Gly Glu Leu Arg Tyr Ala Ile Asp Ala Glu Leu Lys Gly Val Gly Leu
                            120
                                                125
Val Arg Tyr Gly Thr Glu Phe Met Pro Glu Gly Arg Val Leu Ile Arg
                        135
                                            140
His Leu Lys Gln Gln Gln Tyr Leu Asp Asn Thr Ala Arg Leu
                    150
<210> 10568
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10568
Lys Leu Gly Glu Arg Gln Pro Glu Arg Pro Asp Ile Tyr Phe Thr Leu
                                    10
Val Gly Lys Asp Thr Leu Lys Ser Asn Phe Ser Met Val Tyr Cys Arg
            20
                                25
Thr Cys Ala Val Ala Gly Ser Glu Ile Leu Ile Ile Asp Phe Phe Ala
                            40
Val Ser His Cys Ile Leu Ser Gly Glu Lys Val Asn Gly
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<210> 10569

<400> 10571

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<211> 85
<212> PRT
<213> Enterobacter cloacae
<400> 10569
Asn Val Arg Glu Asn Arg Leu Val Arg Leu Asn Gly Leu Glu Pro Ser
Thr Pro Thr Met Ser Arg Trp Cys Ser Asn Gln Leu Ser Tyr Arg Arg
                                25
            20
Lys Met Val Arg Ser Ile Gly Leu Glu Pro Thr Thr Pro Thr Met Ser
                            40
Arg Trp Cys Ser Asn Gln Leu Ser Tyr Glu Arg Ile Val Leu Ser Val
                        5.5
Thr Thr Gly Thr Asn Ile Ser Gly Thr Ala Val Phe Thr Thr Gly Leu
                    70
                                        75
Glu Gly Thr Ala Leu
<210> 10570
<211> 235
<212> PRT
<213> Enterobacter cloacae
<400> 10570
Val Thr Leu Cys Val Gly Ser Ser Ala Arg Ser Trp Ser Lys Thr Ile
                                    10
His Ser His Leu Ser Ser Ala Cys Pro Ile Asn Gln Asn Glu Cys Ser
           20
                                25
Asn His Ile Ser Gln Phe Ser Ile Asp Ile Lys Val Gln Asp Trp Leu
                            40
Ser Arg Ser Arg Val Ala Phe Ile Asp Phe His Asn Leu Arg Asn Thr
                        55
Asp Lys Thr Thr Leu Ile Thr Val Glu His Leu Glu Ala Leu Leu Thr
                    70
                                        75
Val Met Ser Thr Thr Leu Val Ala Tyr Ala Pro Tyr Ser Lys Lys Arg
                                    90
                                                         95
Leu Asn Phe Ser Phe Leu Asn Ser Phe Thr Leu Ser Lys Thr Ser Gln
                                105
Ser Tyr Thr Leu Thr Phe Pro Val Val Leu Ser Pro Leu Leu Asp Ala
                            120
Leu Gly Gly Phe Ile Gln Glu Cys Ile Thr Glu Lys Leu Leu Lys Arg
                        135
                                            140
Arg Asn Ser Asn Phe Met Val Tyr Glu Tyr Leu Lys Arg Ser Gly Gln
                    150
                                        155
Ser Ser His Lys Val Glu Asp Ile Asn Asn Asp Leu Gln Leu Lys Thr
                165
                                    170
Leu Asn Ile Arg Leu Met Ser Val Leu Thr Gly Leu Ser Gln Gln Gly
            180
                                185
                                                     190
Leu Ile Ser Phe Ile Cys Asp Gly Lys Arg Gly Asp Arg Ile Glu
                            200
                                                205
Glu Leu Gln Phe Ile Pro Tyr Val Gln Arg Thr His Pro Glu Val Leu
                        215
                                            220
Thr Phe Gln Glu Trp Ile Ser Pro Val Asp
                    230
                                        235
<210> 10571
<211> 79
<212> PRT
<213> Enterobacter cloacae
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Lys His Asp Arg Phe Gly Ser His Pro Val Arg Arg Thr Tyr Ser Thr Arg Gly Ser Pro Met Ser Asn Gln Pro Thr Ser Leu Pro Glu Glu Asp Ile Glu Phe Val Met Asp Thr Phe Gln Arg Ser Met Gly Lys Ser Lys Pro Val Arg Asp Thr Gln Ile Glu Gly Glu Lys Pro Gln Ser Lys Glu 55 Ser Ala Asn Ser Thr Glu Asn Pro Gly Tyr Glu Glu Phe Phe <210> 10572 <211> 153 <212> PRT <213> Enterobacter cloacae <400> 10572 Gly Met Gly Asp Ile Val Ile Lys Arg Arg Asn Ile Arg Arg Ser Val Tyr Gly Leu Leu Ile Val Leu Ile Ala Gly Asn Val Trp Leu Gly Leu Arg Ala Asp Lys Ile His Lys Val Arg Tyr Gln Asp Phe Trp Ser Pro 40 Ala Thr Val Ile Lys Val Thr Val Met Pro Ser Thr Asn Glu Ile Gln Leu Ser Gly Lys Ile Pro Lys Ser Val Arg Val Ser Asn Asn Tyr Val Glu Tyr Ser Leu Pro Gly Thr Leu Ser Asp Lys Thr Ile Tyr Arg Ser 90 Val Leu Glu Asp Glu Met Leu Thr Leu Leu Asn Ala Gly Gly Gln Leu 105 100 Glu Val Lys Tyr Thr Leu Asp Lys Gln Thr Asn Arg Thr Lys Val Cys 115 120 Thr Lys Cys Leu Arg Val Ile Lys Asp Ile Asn His Gln Tyr Ser Ala 130 135 Thr Glu Val Lys His Gly Gln Ser 145 150 <210> 10573 <211> 110 <212> PRT <213> Enterobacter cloacae <400> 10573 Pro Thr Ala Gly Arg Arg Ile Ile Tyr Phe Trp Gln Ser Val Gly Phe Val Arg Val Ile Lys Asp Ser Gly Phe Leu Pro Ala Phe Phe Lys Pro Pro Cys Ile Val Leu Ala Pro Phe Met Arg Gly Phe Phe Ala Ser Phe Tyr Glu Leu Thr Ser Leu Ser Phe Ile Gln Arq His Lys Lys Leu Phe Arg Val Thr Glu Pro Ile Arg Leu Gln Ser Asp Val Ala Ile Leu Val Lys Val Phe Ser Lys Gly Pro Val Lys Cys His Leu Leu Ile Leu Lys Leu Asn Pro Ile Met Gln Val Thr Ala Tyr Trp Leu 105

<210> 10574 <211> 608 <212> PRT <213> Enterobacter cloacae

<400> 10574 Gly Tyr Asn Leu Phe Pro Glu His His Met Arg Lys Thr Leu Ile Gly 10 Cys Met Val Ala Thr Ala Leu Ala Thr Val Ser Ser Ala His Ala Gln 25 Val Phe Ser Tyr Ser Phe Thr Asp Thr Asn Lys Ala Val Arg Asn Ile Lys Pro Ala Thr Gln Thr Tyr Leu Asn Pro Ala Gly Val Leu Thr Leu 55 Asn Leu Ile Ser Gly Leu Asp Arg Tyr Glu Arg Val Thr Val Thr Arg 70 75 Asp Ser Asp Lys Lys Val Met Tyr Ser Ser Val Ser Thr Lys Thr Ser 85 90 Val Ala Asp Arg Ile Val Ala Ala Asp Gly Thr Glu Tyr Tyr Gly Lys 110 100 105 Asp Met Val Leu Pro Ala Leu Gly Glu Gly Thr Phe Thr Val Val Asn 120 115 Glu Thr Leu Asp Ile Arg Gln Thr Val Val Ser Thr Ser Thr Tyr His 135 140 Phe Ile Val Asp Thr Thr Pro Pro Arg Tyr Lys Ser Ile Tyr Pro Ser 150 155 Gln Asn Ala Gly Tyr Asp Met Val Leu Ser Gly Pro Leu Trp Glu Leu 165 170 175 Gly Arg Gly Gly Ser Gly Gln Phe Ser Ile Phe Ala Asp Gly Ile Glu 180 185 Asp Ala Ser Gly Ile Ala Lys Ile Arg Leu Val Ile Lys Arg Ser Asn 200 195 205 Gly Ser Val Val Ser Asp Asn Asn Leu Ser Tyr Asp Thr Ala Asn Lys 215 220 Arg Ala Phe Tyr Pro Trp Ile Lys Asp Met Asn Thr Gln Ala Gly Met 230 235 Pro Ser Ser Asp Leu Asp Glu Glu Phe Thr Phe Asn Phe Ile Val Thr 245 250 Asp Leu Ala Gly Asn Thr Leu Asn Ile Pro Pro Gln Arg Phe Leu Tyr 260 265 Asp Asp Gln Met Gly Glu Phe Thr Pro Phe Ala Val His Asp Ser Arg 275 280 Val Ser Thr Ser Val Val Pro Gly Ile Ser Ser Gly Tyr Val Pro Phe 295 300 Lys Arg Gly Leu Thr Val Leu Glu Asn Pro Tyr Lys Leu Val Ile Arg 310 315 Ile Pro Arg Thr Asn Trp Lys Pro Tyr Arg Asn Gly Gly Met Ser Ile 325 330 Thr Asn Asn Tyr Gly Gly Val Gln Val Leu Ser Glu Asp Ala Thr Tyr 340 345 Val Tyr Val Glu Val Lys Leu Pro Gln Gly Ala Leu Asp Gly Asn Tyr 360 Tyr Arg Pro Val Asn Thr Tyr Gln Trp Ser Gly Gly Asp Leu Gly Gln 375 380 Tyr Ala Ser Trp Leu Asn Trp Asp Pro Ala Ser Val Lys Ser Pro Ala 390 395 Trp Gly Ser Ser Pro Ile Glu Arg Gln Lys Ala Asp Gly Thr Trp Phe 410 Asn Ser Val Asn Trp Asn Leu Phe Lys Ala Ser Asp Met Pro Ile Lys 425 430 Leu Thr Asn Ile Arg Phe Asn Val Gln Ala Arg Pro Tyr Asp Gln Lys 440 Ile Thr Gly Gly Ala Thr Cys Ser Ile Pro Ala Gly Ser Thr Thr Cys

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5871
                        455
                                            460
Thr Val Ser Leu Pro Gln Asp Ile Ile Asn Gly Thr Thr Gly Tyr Leu
            470
                                  475
His Ser Gly Tyr Glu Val Arg Ser Thr Thr Glu Ala Thr Phe Phe Ala
               485
                                   490
Pro Ile Trp Glu Asn Ile Ala Trp His Thr Leu Gly Pro Ser Val Thr
           500
                               505
Gly Phe Asp Tyr Ile Glu Thr Thr Asn Ile Leu Gln Val Tyr Val Asn
                           520
Gln Pro Gly Asp Gly Ser Tyr Phe Asp His Val Tyr Val Asn Arg Val
                        535
Trp Leu Ser Asp Lys Asn Arg Asn Ala Glu Ile Ser Val Thr Gly
                   ·550
                                        555
Lys Gln Thr Gly Arg Asn Met Ala Ser Gly Asn Tyr Thr Tyr Glu Phe
                                    570
Asn Met Lys Glu Val Pro Glu Gly Ser Tyr Asn Val Val Ile Asn Ala
                                585
Gln Asp Thr Phe Asn Asn Thr Gly Asn Leu Pro Tyr Gln Thr Val Val
                            600
<210> 10575
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 10575
Val Asp Gln Val Trp Ile Ala Ile Cys Lys Gln Cys Ile Leu Cys Lys
                                    10
His Val Gln Lys Asn Gly Thr Thr Ala Tyr Lys Gly Phe Tyr Pro Pro
           20
                                25
                                                    30
Ala Thr Met Ile Val Trp Val Val Met Ala Asp Glu Arg His Gln Phe
                            40
                                                45
Arg Phe Ser Thr Ser Pro Phe Asp Tyr Arg His Val Ser Glu Met Ser
                       55
Ser Gln Ser Val Tyr Thr
<210> 10576
<211> 103
<212> PRT
<213> Enterobacter cloacae
<400> 10576
Ala Pro Lys Glu Lys Ser Val Thr Val Leu Asp Val Ile Leu Ser Leu
                                    10
Ile Val Ile Ile Ala Thr Met Asn Gly Asp Ala Ile Pro Ser Val Ala
Arg Thr Ile Thr Asp Ile Ser Asp Arg Phe Ser Leu Ala Asp Pro Leu
                           40
                                                4.5
Leu Ile Ala Asp Ile Ala Leu Asn Ile Thr Asn Val Leu Leu Ser Ile
                        55
Arg Lys Gln His Lys Ser Met Tyr Asn Ile Gly Phe Pro Gln Pro Ile
                   70
                                        75
Ser Asp Gly Tyr Pro Val Ile Leu His Lys Phe Asp Ser Thr Asp Ala
               85
                                    90
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<210> 10577

Phe Lys Ile Ser Leu Pro 100

<211> 65

<212> PRT

## <213> Enterobacter cloacae

65

<210> 10578 <211> 62 <212> PRT <213> Enterobacter cloacae

Leu Glu Phe Thr Ser Ile Glu Arg Val Pro Ser Phe Ser 50 55 60

<210> 10579 <211> 127 <212> PRT

<213> Enterobacter cloacae

<400> 10579

Ala Leu Ser Ile Tyr Ser Val Glu His Lys Val Thr Phe Ser 115 120 125

<210> 10580 <211> 185 <212> PRT

<213> Enterobacter cloacae

<400> 10580

Ile Lys Arg Cys Ser Gly Ala Gln Phe Asp Arg Arg Phe Thr Ile Asn 1 5 10 15
Gly Asn Asn Val Thr Thr Ser Gly Val Ile Asn Leu Arg Ile Gly Pro

```
20
                                25
Leu Tyr Val Gln Arg Asn Ala Ile Asn Ser Asp Thr Val Thr Gly Ile
                            40
                                                 4.5
Phe Glu Ala Ala Ile Ile His Gln Asp Thr Asn Ile Ile Gly Thr Arg
                        55
                                             60
Cys Lys Ile Asp Ile Ser Val Ile Asn Glu Gln Thr Leu Ile Thr Arg
                    70
                                        75
Tyr Lys Thr Ser Arg Ile Thr Lys Arg Gly Gly Tyr Ile Arg Leu Val
                                    90
Ser Lys Asn Arg Thr Arg Ile Leu Thr Cys Asp Gly Thr Ile Glu Ala
                                105
Val Cys Ile Thr Ile Asn Leu Ser His Asn Ser Ala Val Thr Tyr Lys
                            120
Val Tyr Ala Asn Thr Leu Phe Lys Arg Cys Phe Ser Pro Pro Gly Asn
                        135
                                            140
Val Gln Ala Leu Ser Ile Ile Pro Gln Asn Leu Lys Ile Thr Ser Arg
                    150
                                        155
Pro Gly Asn Asp Phe Ala Ser Cys Thr Arg Asp Pro Asp Thr Ala Ala
                                    170
                165
Thr Gly Ala Gly Gly Phe His Leu
            180
                                185
<210> 10581
<211> 75
<212> PRT
<213> Enterobacter cloacae
<400> 10581
Thr Lys Cys Tyr Ser Gln Gln Phe Arg Gln Cys Met Ser Leu Pro Leu
                                    10
Asp Asp Lys Pro Cys His His Ala Asp Pro Val Gln Glu Gln Glu Leu
                                25
Glu Leu Glu Leu Val Gln Val Ser Asp Leu Val Gln Val Leu Val Ser
        35
                            40
Tyr Gln Ala Arg Glu Ser Tyr Leu Val Pro Gly Pro Val Thr Ala Leu
                        55
Asn Ala Asp Thr Ser Arg Arg Leu Arg His
<210> 10582
<211> 111
<212> PRT
<213> Enterobacter cloacae
<400> 10582
Arg Trp Tyr Glu Asn Asp Lys Gly Lys Thr Asp Ile Val Asn Phe His
                                    10
Lys Thr Lys Met Asn Leu Phe Ile Tyr Leu Leu Glu His Ala Phe Gln
Arg Glu Val Thr Ser Asp Glu Leu Leu Ile Met Phe Trp Asp Lys Tyr
Gly Leu Lys Ser Ser Arg Arg Gln Leu Trp Tyr Val Leu Gly Gln Leu
Lys Leu Ser Leu Tyr Ser Leu Gly Ile Pro Tyr Asp Phe Ile Gln Thr
Lys Lys Gly Arg Gly Tyr His Leu Glu Lys Val Lys Ile Tyr Leu Ile
                                    90
Ile Asp Ser Gly Thr Gln Cys Ser His Leu Asp His Ser Arg
                                105
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<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10583
Ser Ile Lys Gln Gln Ala Val Gln Leu Ile Arg Leu Leu Ile Ile Leu
Leu Trp Gly Leu Trp Leu Phe Phe Leu Gln Pro Met Glu Val Pro Leu
                                25
His Ser Leu Leu Arg Gly Asp Leu Leu Val Phe Tyr Gln Arg Met Ala
                            40
Met Val Gln Ala Leu Trp Pro Val Leu Val Val Leu Val
                        55
<210> 10584
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10584
Ser Ala Leu Leu Gly Asn Arg Phe Phe Ala Gln Gly Val Gly Asp Ile
Gln Pro Gly Val Thr His Val Gln Ala Leu Val Gln Thr Leu Ser Ala
            20
                                25
Thr Ala Asp Lys Asp His Phe Leu Thr Gln Lys Glu Ala Arg Ala Ile
                            40
Ser Lys Ile Ile Ala Arg Gln Glu Ala Ala Lys Ala Gln
   50
                        55
<210> 10585
<211> 66
<212> PRT
<213> Enterobacter cloacae
<400> 10585
Phe His Val Ile Phe Arg Ile Arg Lys Ser Asn Leu Thr Ile Phe Met
                                    10
Leu Arg Lys Phe Gly Pro Phe Phe Arg Met Lys Tyr Gln His Leu Leu
                                25
Asn Pro Val Arg Ser Leu Leu Ile Leu Cys Gly Phe Asn Arg Ile Phe
Pro Val Asn Asn Ser Val Gly Phe Ser Ala Ile Phe Gly His Lys Leu
                        55
Met
65
<210> 10586
<211> 76
<212> PRT
<213> Enterobacter cloacae
<400> 10586
Val Ile Val Gly Ile Gln Arg His Lys Pro Gly Val Ala Ala Ile Ala
Asp Val Asn Gly Ala Asp Gly Arg Arg Ala Val Arg Tyr Arg Leu Pro
Asp Pro Asn Ala Arg Lys Leu Leu Ala Gly Ser Leu Gly Gln Arg Asp
Gly Ala Gly Ile Glu Ala Gly Met Ile Gly Arg Leu Arg Arg Asn Arg
Leu Asn Lys Met His Arg Lys Leu Ala Phe Gly
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<210> 10587
<211> 69
<212> PRT
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<213> Enterobacter cloacae
<400> 10587
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Ile Ala Trp Tyr Ser Ala Arg Tyr Arg Cys Asn Phe Ile Thr Met His Cys Thr Ala Phe Thr Arg Phe Leu Lys Pro Leu Ala Leu Asn Val Ala 25 Cys Asp Thr Val Ile Phe Arg Arg Leu Gly His Tyr Ala Arg Leu Met 40

Thr Gln Gln Thr Ser Ile Leu Cys Ala Thr Gly Ser Glu Gln Asn Pro 55

Thr Ser Ile Lys

<210> 10588 <211> 83 <212> PRT <213> Enterobacter cloacae

<400> 10588

Arg Ala Ser Gly Val Asn Val Pro Leu Ala Gly Asp Lys Ala Asn Glu 10 Gly Glu Met Asp Ile Ser Val Asp Ser Lys Thr Gly Ser Lys Pro Val 20 25 Met Glu Ser Asn Ser Arg Ile Ile Leu Ala Ala Asp Ala Ala Leu Ala 40 Ala Ile Asn Glu His Phe Ser Asp Glu Phe Val Lys Gly Glu Trp Ala 55 Asp Tyr Ala Ala Leu Arg Arg Ala Ala Leu Arg Thr Ala Leu Ala Ser 65

Leu Ile

<210> 10589 <211> 64 <212> PRT <213> Enterobacter cloacae

<400> 10589 Met Pro Asp Ala Ser Asp Tyr Phe Ser Cys Asn His Ile Phe Gly Phe 10 Thr Val Arg Lys Val Gly Asp Leu Asp Thr Val Ile Val Ser Asn Pro 20 25 Ile Ile Ser Leu Phe His Asn Ser Pro Leu Lys Leu Phe His Leu Glu 40 Val Tyr Met Thr Ile Gln Asn Pro Val Val Asp Lys Thr Phe Phe 50

<210> 10590 <211> 91 <212> PRT <213> Enterobacter cloacae <400> 10590

Lys Thr Asn Ile Ile Lys Met Ile Gln Ser Gln Leu Thr Gln Val Ile

 Phe
 Trp
 Leu
 Gly
 Leu
 Ile
 Ala
 Ala
 Leu
 Pro
 Ala
 Phe
 Tyr
 Arg
 Phe
 Val

 Tyr
 Ala
 Gly
 Ser
 Ser
 Leu
 Ile
 Trp
 His
 Lys
 Tyr
 Phe
 Pro
 Val
 Lys
 Lys

 Ile
 Glu
 Ile
 Glu
 Asn
 Glu
 Asp
 Lys
 Ala
 Leu
 Ile
 Glu
 Asn
 Ile

 65
 70
 70
 75
 80

 Glu
 Ser
 Arg
 Lys
 Lys
 Val
 Arg

 85
 90
 90

<210> 10591 <211> 300

<212> PRT

<213> Enterobacter cloacae

<400> 10591 Asn Arg Lys Val Met Glu Lys Thr Thr Ser Phe Lys Val Phe Tyr Asp 10 Ala Asp Asp Lys Glu Leu Ser Lys His Ala Ile Asp Ala Glu Thr Leu 20 25 Gly Asn Ser Ile Leu Ser Met Ala Asn Leu Ile Ser Lys Ala Asp Asp 45 Leu Ile Asn Glu Gly Gly Lys Ser Val Lys Val Leu Phe Ser Ala Pro 55 Val Glu Lys Gly Ser Val Gly Val Ala Tyr Thr Val Val Gln Leu Leu 70 75 Pro Asp Ala Ile Asp Val Leu Lys Thr Ile Gly Ile Val Gly Ala Val 8.5 Gly Thr Ala Val His Ala Ser Ala Leu Ser Leu Ile Arg His Leu Gly 100 105 Ser Lys Lys Val Ile Ser Val Thr Arg His Thr Gly Lys Lys Gly 115 120 125 Ile Ala Thr Leu Glu Leu Asp Gly Glu Asp Ile Glu Cys Ser Ala Pro 135 140 Val Ala Ala Leu Val Thr Asp Pro Ala Ile Arg Asn Ala Leu Ile Ala 150 155 Val Val Gln Lys Pro Leu Glu Gly Lys Asp Ser Pro Val Phe Lys Ile 170 175 165 Val Asp Ser Lys Gly Lys Glu Ile Val Arg Leu Glu Gly Asp Glu Thr 180 185 190 Glu Glu Ile Lys Pro Val Pro Lys Gly Thr Leu Leu Glu Lys Asp Val 200 205 Glu Ile Lys Glu Val Asn Val Lys Phe Thr Gln Val Asn Phe His Ser 215 220 Glu Lys Gly Trp Arg Met Glu Tyr Lys Asn Glu Glu His Ser Val Leu 230 235 Leu Thr Asp Tyr Glu Phe Leu Ala Lys Val Arg Gly Ala Glu Gly Thr 250 245 Ile Thr Ser Glu Asp Leu Phe Ser Val Ser Leu Glu Ile Thr Lys Thr 265 Thr Ser Ala Arg Ala Ser Ala Glu Lys Tyr Val Ile Lys Lys Val Ile 280 Arg His Arg Val Ala Gln Gly Lys Lys Leu Ile

295

<sup>&</sup>lt;210> 10592

<sup>&</sup>lt;211> 66

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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<400> 10592
Thr Phe Phe Leu Phe Trp Tyr Ser Trp Phe Ile Ser Pro Val Asp Phe
Gln Cys Arg Thr Pro Leu Ala Asn Leu Pro Thr Arg Cys Phe Gly Lys
                                 25
Ile Leu Val Ala Leu Ala Val Met Leu Ala Gly Cys Ala Ile Gln Phe
Asp Gln Met Ala Tyr Thr Ala Leu Asn Ser Met Asn Val Val Leu Trp
                        55
His
65
<210> 10593
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 10593
Ser Asn Pro His Thr Glu Glu Ile Ala Met Lys Glu Gly Phe Tyr Trp
Ile Gln His Asn Gly Leu Val Gln Val Ala Tyr Tyr Thr Asp Gly Ile
Thr Glu Asp Leu Glu Thr Gly Gln Thr Ile Thr Gly Val Trp His Leu
                             40
Thr Arg Gly Asp Asp Ile Cys His Asn Gly Glu Ala Glu Val Ile Glu
Gly Pro Leu Ser Ala Pro Leu Lys
                    70
<210> 10594
<211> 139
<212> PRT
<213> Enterobacter cloacae
<400> 10594
Glu Asp Ser Gln Gln Tyr Glu Gly Gly Pro Met Ser Asp Pro Phe Ser
                                     10
Gly Thr Gly Leu Ala Gly Leu Ala Leu Thr Gly Ala Ser Val Tyr Gly
Leu Leu Thr Gly Thr Asp Tyr Gly Val Val Phe Gly Ala Phe Ala Gly
                             40
Ala Val Phe Tyr Ile Ala Thr Ala Ala Asp Leu Ser Val Leu Arg Arg
                        55
Leu Ala Tyr Phe Phe Val Ser Tyr Ile Val Gly Ile Leu Cys Ser Gly
                    70
                                         75
Leu Leu Gly Ser Lys Leu Thr Ser Trp Thr Gly Tyr Thr Glu Lys Pro
                8.5
                                     90
Leu Asp Ala Ile Gly Ala Val Ile Ala Ser Ala Leu Ala Val Gln Ile
            100
                                 105
Leu Thr Phe Leu Asn Lys Gln Asp Ile Gly Ser Leu Val Ala Leu Ile
                            120
Thr Arg Arg Gly Gly Ser Gly Gly Thr Lys
    130
                        135
<210> 10595
<211> 96
<212> PRT
<213> Enterobacter cloacae
<400> 10595
Arg Ala Gly Glu Val Gln Val Val Leu Asn Asp Pro Thr Ala Thr Ile
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<210> 10596

<211> 114

<212> PRT

<213> Enterobacter cloacae

<400> 10596

 Arg
 Met
 Asn
 Ser
 Leu
 Asn
 Arg
 Leu
 Arg
 Pro
 Ala
 Lys
 Gln
 Phe
 Arg
 Cys

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105

110

<210> 10597

<211> 244

Ser

<212> PRT

<213> Enterobacter cloacae

100

<400> 10597

Arg Thr Gly Arg Ile Thr Val Met Asn Asn Ser Gln Arg Gln Leu Arg Leu Leu Asn Leu Val Arg Lys Leu Leu Lys Leu Gly Arg Ser Asn Ser Asn Ala His Glu Ala Gly Leu Ala Leu Gln Arg Ala Gln Lys Leu Met Ala Arg Tyr Gly Ile Ser Glu Leu Asp Ala Gly Leu Thr Ser Val Arg Glu Ala Ser Ser Arg Thr Ala Pro Ser Asp Ala Glu Lys Val Pro Glu 75 70 Trp Met Val Thr Leu Val Arg Gly Val Cys His Ala Phe Gly Cys Arg 90 Ala Tyr Tyr Ser Trp Arg Gln Thr Ser Ala Gly Tyr Arg Arg Ser Val 110 100 105 Thr Phe Tyr Gly Phe Ser Glu Lys Pro Glu Ile Ala Ala Tyr Ala Phe 120 115 Asp Val Leu Thr Arg Gln Leu Lys Asp Ala Thr Asn Ser Tyr Leu Lys 135 140 Thr Gln Ser Lys Arg Leu Lys Leu Ala Thr Arg Arg Ala Arg Ala Glu 150 155

Gln Phe Arg Asp Gly Trp Val Cys Gly Val Arg Glu Val Ile Ser Ala 165 170 Thr Asp Ile Ser Ser Glu Glu Gln Gln Val Met Ser His Trp Leu Glu 180 185 190 Ser Arg Ser Met Lys Thr Val Thr Thr Arg Glu Leu Lys Ala Cys Arg 200 Gly Ala Asp Thr Ala Arg Tyr Gln Gly Tyr Glu Ala Gly Gln Asn Ala 215 220 Arg Leu His Gln Gly Val Ser Gly Arg Gly Pro Ala Ala Ile Gly Tyr 230 235 Arg Gln Asp

<210> 10598 <211> 199 <212> PRT

<213> Enterobacter cloacae

<400> 10598 Gly Gly Met Met Asn Ser Leu Ser Gln Ala Ala Asn Gly Leu Leu Met 10 Gln Leu Val Met Asp Leu Arg Ser Gly Tyr Leu Arg Arg Cys Glu Ser 25 30 20 Leu Gly Leu Asn Arg Glu Glu Met Gln Met Leu Gln Gly Leu Ser Leu 35 45 40 Glu Glu Leu His Tyr Leu Ser Gly Ser Glu Val Ser Ile Ile Ser Val 55 Gly Ile Asn His Gly Asn Leu Val Arg Met Leu Gln Gln Ala Arg Thr 70 75 Glu Gln Lys Arg Leu Gln Arg Ile Asp Arg Ala Leu Ala Leu Gly Gly 90 85 Ser Ile Glu Leu Met Ala Asn Tyr Phe Gly Leu Ser Ser Thr Asp Val 100 105 Ala Ala Arg Arg Ile Ala Gly Ile Asp Val Arg Pro Gly Arg Gly 120 Asn Ala Leu Gly Asp Glu Glu Asn Ala Ala Leu Trp Arg Gln Trp Gln 135 140 Lys Ser Asp Val Glu Asp Ala Glu Ser Ala Asp Gly Leu Asp Val Met 150 155 Met Leu Ala Ala Glu Gln Met Asn Val Ser Leu Thr Ser Val Trp His 170 175 Ala Val Arg Gly Trp His Lys Thr Arg Gln Pro Ser Pro Ala Arg Thr 180 185 Pro Val Arg Lys Thr Ala

<210> 10599 <211> 126 <212> PRT <213> Enterobacter cloacae

195

70 75 Tyr Thr Arg Leu Asp Glu Lys Gly Cys Gly Tyr Tyr Lys Ile Asp Leu 85 90 Gly Pro Phe Trp Arg Leu Leu Ser Arg Asn Glu Gly Arg Thr Trp Leu 105 Leu Leu Ser His Glu Arg Tyr Asn Ser Ala Ile Arg Lys <210> 10600 <211> 73 <212> PRT <213> Enterobacter cloacae <400> 10600 Gln Pro Arg Val Glu Gln Gln Pro Ala Gly Asn Gly Ile Met His Ile 10 Ser Gly Lys Gln Gln Ala Val Thr Tyr Pro Ala Ile Ile Pro Pro Gly 25 20 Thr Gly Arg Lys Ala Gly Ile His Phe Ile Gln Arg Ile Ser Asn Gln 40 Ala Phe Cys Arg Gln Thr His Tyr Phe Ser Phe Ser Ala Ala Ile Thr 55 Ala Val Leu Asn Cys Gln Tyr Ala <210> 10601 <211> 85 <212> PRT <213> Enterobacter cloacae <400> 10601 Glu Ser Arg Arg Ala Val Ser Ala Pro Ala Pro Pro Leu Arg Leu Ala 10 Ala Ser Ile His Gly Gln Ser Phe Ser Leu Gln Ala Leu Glu Lys His 25 Ala Ala Gln Asp Ser Thr Phe Ser Ser Asn Met Gly Met Arg Val Gly 40 Phe Tyr Glu Gly Ala Ser Glu Lys Ser Arg Cys Gly Arg Thr Gly Gln Arg Asp Ala Tyr Phe Met Leu Leu Ala Arg Val Ser Thr Leu Trp Arg 70 Asn Ala Leu Thr <210> 10602 <211> 144 <212> PRT <213> Enterobacter cloacae <400> 10602 Asn Leu Phe Ala Phe Val Ile Glu Met Ser Phe Gln Pro Asp Asp Trp 10 Leu Phe Arg His Cys Lys Ser Phe Val Arg Tyr Ser Val Pro Ala Phe 20 25 Ile Ser Glu Thr Phe Phe Asn Asn Ala Gly Tyr Asp Arg Val Val Phe 40 45 Ser Ile Phe Arg Ser Trp His Lys Asp Phe Lys Leu Cys Arg Cys Ile 55 Arg Leu Lys Gln Asn Gly Ile Glu Thr Arg Arg Ile Lys Gln Ser Ala 75

Phe Arg Ile Asn Glu Leu Asn Pro Gly Ala Phe Val Val Arg Ile Leu

90 Lys Leu Leu Ser Lys Val Ile Ala Lys Val Asn Tyr Leu Thr Gly Met 105 Leu Ile Arg Asp Cys Thr Asp Gln Val Lys Thr Met Arg Gly His Thr 120 Gln Phe Pro Gly Ser Gly Leu Gly Ile Asp Arg Pro Gly Val Lys <210> 10603 <211> 89 <212> PRT <213> Enterobacter cloacae <400> 10603 Ile Arg Leu Phe Gln Arg Ser Ser Asp Leu Val Val Arg Glu Asn Asp Ala Val Lys Ser Asn Phe Tyr Thr Ala Ile Gln Lys Lys Val Ser Ile 25 Ser His Ile Thr Asn Asn Pro Ala Tyr Phe Arg Met Cys Val Pro Leu 40 45 Asp Val Lys Val Lys Pro Leu Arg Gln Thr Arg Arg Pro Leu Asn Ser 55 60 Ser Leu Ser His Thr Leu Arg Cys Phe Gln Pro Thr Thr Arg Asn Ile 70 75 Ala Arg Asn Val Thr Asp Asn Pro 85 <210> 10604 <211> 76 <212> PRT <213> Enterobacter cloacae <400> 10604 Ser Gly Glu Gln Pro Met Lys Ile Lys Leu Ala Leu Val Ile Ala Phe Ala Gly Phe Ser Ala Gly Val Ser Ala Glu Ile Ala Glu Phe Ser Phe Lys Asp Thr Leu Asn Val Lys Lys Thr Val Ser Pro Ala Ser Val Trp 40 Ile Asn Pro Val Thr Ser Phe Asp Val Ala Gly Leu Phe Phe Arg Ser Gly Pro Leu Tyr Tyr Ala Gln Ser Ala Glu Lys 70 <210> 10605 <211> 175 <212> PRT <213> Enterobacter cloacae <400> 10605 Pro Val Asp Ser Phe Cys His Asp Tyr Ser Arg Thr Asn Arg Arg Asn His Ile Met Thr Lys Tyr Tyr Asp Arg Ser Gly Ile Glu Ile Ser Ser 25 Ala Lys Ile Arg Cys Val Asp Ser Val Lys Gly Thr Ala Glu Tyr Thr 40 Phe Arg Ile Val Cys Asp Lys Cys Asn Gly Arg Gly Glu Arg Lys His 55 Phe Tyr Arg Ser Arg Cys Met Ala Cys Lys Ala Thr Gly Tyr Ser Leu 75 Glu Thr Thr Arg Thr Ala Tyr Thr Leu Asn Ala Leu Tyr Arg Ile Asn

90 Ala Gln Ala Ala Arg Lys Val Ser Ala Ser Leu Gln Asp Glu Arg Leu 105 Arg Thr Glu Ser Ala His Ser Ser Ala Phe Thr Ala Trp Cys Arg Ser 120 His Gln Lys Met Val Asp Ala Ile Thr Gln Gln Ser Ser Asn Asn 135 140 Phe Leu Glu Ser Leu Lys Ser Ser Leu Thr His Gln Arg Gln Leu Ser 150 155 Asp Lys Gln Leu Ala Val Ala Ala Arg Ile Leu Gly Ile His 170 <210> 10606 <211> 402 <212> PRT <213> Enterobacter cloacae <400> 10606 Ile Ala His Pro Leu Arg Leu Lys Met Lys Leu Phe Ser Ile Ser Ser 10 Arg Asp Thr Ser Met Asp Ala Met Phe Tyr Ile Gln Ala Ser Thr Lys 25 Gln Gln Ala Ser Tyr Ile Phe Ser Thr Leu Ser Pro Lys Pro Ile Ala 40 Asn Cys Gln Leu Thr Asp Leu Gln Asn Glu Thr Val Val Pro Ser Ile 50 55 Ser Pro Ile Ser Leu Ser Leu Asn Pro Trp Ser Ile Asn Ser Gln Ser 70 75 Arg Thr Arg Glu Leu Arg Met Ala Thr His Gly Leu Asn Leu Ile Cys 90 Ala Val Thr Asp Glu His Thr Arg Gln Ile Val Asp Phe Cys Asp Asn 100 105 Leu Gly Gln Gln Leu Lys Asp Pro Asp Lys Ser Ala Trp Val Lys 120 Leu Ile Asn Ser Glu Cys Ala Leu Leu Asn Ser Pro Arg Leu Tyr Pro 135 140 Val Leu Leu Glu Pro Asp Thr Pro Ala Gln Phe Glu Ile Phe Val Pro 150 155 Ala Pro Glu Asp Gly Glu His Asp Thr Val Ile Ala Ser Val Val Lys 170 Glu Cys Phe Gly Asp Glu Cys Arg Tyr Arg Val Thr Asp Lys Ala Phe 185 Ala Met Ser Glu Lys Pro Val Ile Arg Leu Glu Ala His Phe Asn Asp 200 Lys Arg Glu Lys Val Leu Glu Leu Thr Phe Ser Cys Phe Asn Leu Ser 215 220 Leu Ser Ala Ser Val His Glu Asn Gln Leu Arg Gln Ile Leu Leu 230 Cys Glu Asp Phe Gly Val Arg Leu Gln Gly Arg Ala Gly Ala Ser Cys 245 250 His Val Asn Met Arg Ser Ala Tyr Arg Arg Leu Ala His Val Gly Thr 260 265 Gly Ser Arg Pro Gly Asp Asp Ser Asp Val Arg Val Tyr Thr Ser Leu 280 285 Lys Glu Glu Lys Asp Val Lys Arg Leu Leu Asp Lys Ser Thr Arg Gly 300 295 Ser Glu Leu Val Pro Ala Arg His Gly Gln Gln Phe Asn Gly Val Leu 310 315 Val Asn Ala Thr Pro Ala Ser Ala Thr Thr Gly Phe Ile Tyr Leu Ser

330

His Asp Phe Pro Glu Gly Gln Phe Met Met Thr Ala Glu Val Leu His

325

340 345 Val Gly Ile Thr Pro Gly Gly Ile Tyr Tyr Ile Glu Thr Leu Asp Gly 360 365 Tyr Arg Phe Ile Val Thr Ala Phe Glu Lys Gly Leu Met Asn Gly Leu 375 380 Arg Glu Phe Ile Ala Ala Asn Glu Glu Tyr Phe Lys Tyr Tyr Arg Trp 385 390 395 Ser <210> 10607 <211> 94 <212> PRT <213> Enterobacter cloacae <400> 10607 Pro Gln Thr Val Leu Glu Ala Gln Met Ser Glu Lys His Phe Ile Val Lys Ile Gln Asn Arg Asn Gly Asp His Glu Asn Ser Tyr Val Arg Leu Leu Val Ser Asp Cys Glu Lys Asn Ala Cys Gln Thr Ala Leu Ile Ser Glu Cys His Gly Glu Leu Glu Gln Leu Ser Phe Glu Asp Gly Gly Val 55 Tyr Asp Tyr Asn Gly Glu Asn His Tyr Ser Val Arg Ser Cys Val Glu 70 75 Val Ala Pro Glu Asp Val Ala Thr Leu Gln Arg Phe Leu 85 <210> 10608 <211> 147 <212> PRT <213> Enterobacter cloacae <400> 10608 Ser Leu Ser Tyr Thr Ser Lys Ile Phe Ile Ile Phe Ser Ser Asp Leu 10 Leu Ala Arg Ile Leu Asp Ser Val Ser Phe Thr Tyr Gly Lys Ser Phe 20 25 Glu Asn Glu Val Asn Gly Met His Ser Gln Asp Pro Ile Thr Lys Leu 40 Thr Gln Thr Leu Gln Arg Asp Asp Gly Ser Gln Val Arg Ile Val Ala 55 Gln Arg Gly Tyr Gly Ser Gly Leu Thr Ala Ser Leu Asp Val Tyr Val 70 75 Leu Arg Arg Asp Ser Ser Glu Ser Asn Trp Ser Leu Cys Gly Lys Asp 90 95 Pro His Pro Glu Trp Arg Lys Met Ser Val Asp Glu Tyr Gln Lys Phe 105 Gly Arg Ser Glu Met Leu Arg Tyr Ala Thr Pro Gly Glu Ile Leu Arg 120 Val Ala Ser Ala Ile Gly Gln Pro Met Ser Phe Leu Asp Gly Asn Pro 130 135 Ala Phe 145 <210> 10609 <211> 238

<212> PRT

<213> Enterobacter cloacae

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Ile Ile Lys Glu Ser Thr Val Ala Asp Asn Tyr Thr Gln Ala Ser Phe
Ile Ile Pro Cys Thr Gln Glu Gln Ala Lys Met Ala Gln Glu Ala Ile
                                25
Thr Phe Val Thr Glu Ala Glu Ile Ala Glu Gly Glu Arg Leu Leu Asp
                            40
Lys Pro Leu Thr Asp Cys Ser Leu Thr Glu Lys Leu Ile Leu Ser Ile
                        55
Ile Glu Asn His Pro Glu Tyr Asp Pro Ser Glu Pro Ser Phe Gly Gln
                                        75
Pro Ser Cys Pro Asp Cys Asn Tyr Glu Leu Leu Phe Ala Thr Glu Val
                8.5
                                    90
Thr Ser Ser Gly Leu Ala Val Phe His Gly Glu Thr Ile Asp Leu Asp
            100
                                105
                                                     110
His Ala Ile Cys Leu Thr Thr Ala Val Leu Ser Val Phe Asp Leu Ser
        115
                            120
Glu Met Val Thr Ile Thr Ala Ala Phe Thr Cys Ser Lys Ser Arg Thr
                        135
                                            140
Asp Glu Phe Gly Gly Met Thr Ile Leu Val Thr Lys Asp Thr His Tyr
                    150
                                        155
                                                             160
Tyr Gln Asp Gly Cys Gln Phe Ser Arg Leu Met Asn Glu Ala His Lys
                165
                                    170
Ala Gly Ile Gln Tyr Ala Leu Cys Lys Val Thr His Tyr His Gly Glu
                                185
Ser Ser Tyr Val Ala Ser Tyr Val Leu Ser Cys Asp Val Ala Asp Ser
        195
                            200
Ala Gln Glu Val Val Asn Lys Arg Leu Lys Ala Cys Ala Gly Lys Glu
                        215
Pro Glu Glu Ser Ser Pro Arg Gly Trp Lys Glu Pro Arg Tyr
                    230
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<210> 10610

<211> 545 <212> PRT

<213> Enterobacter cloacae

<400> 10610

Arg Ala Leu Thr Leu Pro Val Tyr Phe Ser Gly Leu Asp Arg Tyr Ile Thr Leu Ser Leu Leu Lys Ser Asp Gly Ser Leu Ile Trp Ser Thr Lys 25 Ser Ser Leu Val Thr Val Asp Asp Arg Thr Thr Ser Ser Thr Gly Phe Asp Tyr Tyr Gly Lys Thr Leu Thr Val Pro Ala Met Gly Glu Asp Ser 55 Phe Thr Leu Arg Glu Val Ile Thr Asp Leu Gln Gly Lys Glu Val Ser 75 Arg Gln Asp Tyr Pro Leu Ala Ile Asp Arg Thr Pro Pro Ala Thr Gly 85 90 Thr Ile Ser Tyr Thr Arg Asn Gly Trp Asn Phe Gly Ser Glu Ala Ile 100 105 110 Phe Thr Ser Val Pro Ala Gly Met Gln Tyr Ala Ser Val Gln Ala Leu 120 125 Val Phe Asn Gly Leu Ser Asp Lys Gly Ser Gly Leu Ala Asn Ala Glu 135 140 Tyr Phe Ile Thr Asp Ala Ala Gly Val Glu Arg Lys Lys Pro Ala Glu 150 155 Ile Aşn Thr Val Glu Gly Ser Val Thr Val Gln Val Ala Asp Ala Ser 165 170 Ser Asn Ala Leu Ala Pro Glu Asn Arg Ser Glu Tyr Lys Val Gly Ile

180 185 Tyr Leu Tyr Asp Lys Ala Gly Asn Arg Ser Glu Leu Ser Arg Arg Ser 200 Val Ile Asp Arg Val Lys Pro Asp Asp Ile Ile Gln Val Gln Asp Ala 215 220 Thr Thr Gly Ser Trp Val Ser Tyr Gln Ser Gly Met Thr Val Phe Gln 230 235 Asn Pro Ile Ser Val Arg Val Leu Arg Lys Lys Ser Asp Phe Thr Ala 245 250 Val Asn Gly Ser Lys Tyr Gly Trp Ala Asp Ser Asn Phe Gln Thr Ser 260 265 270 Asp Ser Thr Tyr Asn Ile Tyr Thr Phe Lys Tyr Ile Tyr Pro Asn Val 280 285 275 Gly Asp Thr Tyr His Glu Phe Gln Thr Leu Ala Gly Gly Val Arg Arg 290 295 300 Ile His His Asn Ser Leu Asn Phe Thr Pro Ala Pro Ala Met Glu Ile 310 315 Ala Pro Lys Ile Val Ala Lys Glu Met Tyr Arg Ser Asp Thr Ser Glu 325 330 Trp Leu Thr Gln Ala Ser Ile Ser Val Lys Thr Ala Thr Ile Ser Arg 340 345 Ile Lys Val Thr Ala Glu Pro Arg Pro Tyr Val Gln Lys Phe Arg Thr 360 Val Lys Asn Ala Ala Trp Phe Cys Thr Ile Pro Val Gly Gln Ser Ser 375 Cys Glu Met Thr Val Asn Phe Asn Tyr Thr Ser Asp Lys Gly Phe Glu 390 395 Tyr Leu His Leu Tyr Ser Gly Lys Asp Gly Asp Ser Ile Phe Asp Ala 410 Leu Ala Gly Asn Phe Thr Val Ile Trp Asp Asn Asn Pro Pro Val Val 425 420 Asn Val Ala Gln Val Asn Lys Ala Ser Lys Thr Ile Thr Met Thr Ala 440 Thr Asp Asn Asp Arg Val Asn Ala Trp Asn Ile Ser Tyr Trp Asp Thr 455 Lys Val Phe Glu Ala Thr Leu Lys Asn Ala Arg Gly Glu Thr Phe Thr 470 475 Leu Lys Pro Val Thr Val Ser Glu Ser Asp Tyr Lys Thr Lys Asn Ala 485 490 Thr Phe Ser Tyr Ala Gly Leu Pro Asp Gly Asp Tyr Thr Val Val Ser 500 505 Val Ser Ala Thr Asp Leu Gly Gly Lys Leu Arg Asn Gln Thr Ala Tyr 520 Gly Pro Ala Glu Asn Ser Leu Asn Ala Ser Gly Tyr Cys Val His Leu 535

545

<210> 10611

<211> 97

<212> PRT

<213> Enterobacter cloacae

## <400> 10611

<210> 10613 <211> 267 <212> PRT

<213> Enterobacter cloacae

<400> 10613 Leu Ser Val Lys Ala Ile Ile Lys Pro Lys Thr Pro Leu Ser His Thr 10 Leu Val Tyr Arg Thr Gly Ile Ile Arg Leu Leu Ala Cys Leu Pro Arg 20 Ile Leu Val Gly Asn Ser Gly Thr Lys Pro Leu Met Ala Pro Leu Lys Ile His Ser Thr Leu Pro Val Ile Ala Phe Thr Phe Asn Gly Ala Asp Ala Glu Arg Lys Leu Val Lys Gly Leu Glu Asn Leu Arg Ile Ser Val Thr Asp Ala Ser Gly Asp Ala Ser Leu Ile Ser Leu Gln Leu Ala Gly 90 Gly Pro Asn Ser Glu Lys Val Thr Leu Ala Phe Thr Pro Leu Ser Lys Asp Val Phe Ile Pro Glu Tyr Pro Arg Ile Phe Pro Asn Thr Asp Glu 120 Ser Gly Gln Met Tyr His Leu Glu Ala Leu Ala Ile Asp Glu Ser Gly 135 140 Asn Arg Thr Thr Lys Thr Leu Asn Phe Thr Tyr Gln Pro Ala Asn Leu 150 155 Ile Met Leu Asp Asn Leu Lys Thr Leu Ala Thr Ala Val Ala Leu Lys 165 170 Ala Thr Asp Asn Thr Pro Leu Ala Ile Ile Arg Thr Ser Val Leu Arg 185 190 Arg Gln Asp Gly Ser Ile Ile Thr Gly Gln Leu Asn Gly Thr Leu Thr 200

Val Gln Lys Asn Ala Gln Phe Gly Val Thr Val Ala Gly Val Thr Val 215 220 Gln Pro Gly Glu Thr Lys Ser Leu Ser Leu Asp Leu Gly Asn Gly Glu 230 235 Glu Arg Thr Tyr Pro Val Thr Pro Ala Val Ser Gly Gln Ser Gly Thr 245 250 Ala Thr Phe Thr Ile Glu Phe Pro Gln Thr <210> 10614 <211> 151 <212> PRT <213> Enterobacter cloacae <400> 10614 His Glu Tyr Glu Arg Ser Arg Val Met Ser Asn Asn Thr Glu Val Ile 10 Ser Cys Asp Leu Phe Ser Thr Leu Ser Ser Leu Asn Phe Ser Thr Glu 25 20 Asp Ile Thr Gly Leu Thr Pro Ala Asn Phe Arg Lys Gly Ala Phe Leu 40 45 His Ala Lys Ile Ser Ala Ser Gln Ala Thr Arg Ala Thr Asp Ile Ser 55 Ile Gln Leu Leu Thr Asp Arg Val Ser Gly Glu Met Asn Tyr Val Ile 70 7.5 Val Ile Gly Arg His Glu Gly Leu Leu Gln Ser Glu Ala Ile Asp Pro 85 90 Asn Ala Asp Lys Gln Tyr Arg Glu Asn Arg Tyr Ser Arg His Phe Ile 100 105 Ser Val Thr Asp Ala Asn Thr Lys Ala Leu Lys Lys Thr Cys Lys Val 120 Met Lys Thr Tyr Ile Lys Glu Gln Ala Phe Lys Pro Asn Thr Trp Gly 135 His Ser Phe Ile Lys Gly <210> 10615 <211> 216 <212> PRT <213> Enterobacter cloacae <400> 10615 Val Gln Arg Asn Asn Ile Thr Gly Ile Leu Val Ala Leu Met Lys Ser Cys Phe Ser Asp Leu Pro Val Lys Asp Gly Thr Ser Gly Thr Trp Lys 20 25 Leu Asp Thr Phe Glu Ile Thr Ala Asp Lys Ala Met Ser Leu Ala Leu Arg Ala Glu Tyr Thr Gly Asn Thr Asp Glu Phe Ile Pro Pro Gly Arg Tyr Arg Arg Leu Ser Asn Gly Trp Asp Val Val Met Ser Asn Thr Pro Met Glu Ile Arg Thr Cys Gln Asp Phe Leu Glu Arg Ala Thr Gly Arg Val Leu Ile Asn Gly Leu Gly Leu Gly Met Val Leu His Ala Ile Leu 105 Gln Lys Glu Asp Val Thr His Val Thr Val Ile Glu Lys Glu Gln Asp 120 Val Ile Asn Leu Val Ala Ala Ser Phe Ala Asn Asp Pro Arg Val Glu

135

Ile Ile His Ala Asp Ala Met Met Tyr Cys Pro Pro Ala Gly Val Thr

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5888
                    150
                                        155
Tyr Asn Ala Cys Trp His Asp Ile Trp Pro Asp Phe Ala Thr Ala Asn
                                    170
Leu Ser Gln Met Asp Lys Leu Glu Ile Lys Tyr Arg Asp Ile Cys Glu
                                185
Trp Gln Gly Ser Trp Gly Arg Glu Glu Cys Glu Gln Lys His Ile Glu
                            200
Phe Gln Asn Leu Gly Ala Asp
    210
<210> 10616
<211> 130
<212> PRT
<213> Enterobacter cloacae
<400> 10616
Asn Ser Gln Gly Gly Ile Arg Tyr Trp Pro Ala Asn Glu Leu Pro Arg
                                    10
Trp Gln Pro Cys Val Leu Ala Arg Thr Leu Ala Thr Pro Phe Lys Pro
            20
Ala Ser Phe Phe Leu Arg Ala Thr Asp Gly Glu Lys Met Asn Leu Asn
Glu Arg Ser Thr Ser Ala Ala Thr Pro Asp Leu Ser Arg Leu Tyr Leu
Ile Ser Gly Arg Ile Met Phe Asp Asp Asp Gln Ala Tyr Leu Val
                                        75
Glu Ala Asp Ser Pro Gly Asp Ala Glu Glu Ala Phe Arg His His Ile
Ala Asp Ser Ala Asp Asp Leu Glu Lys Val Ile Ile Val Ser Ser Thr
                                105
Ser Phe Ala Ser Ala His Ser Ser Arg Val Ile Cys Arg Pro Ala Val
Lys
   130
<210> 10617
<211> 80
<212> PRT
<213> Enterobacter cloacae
<400> 10617
Asn Met Arg Leu Thr Tyr Glu His Gln Pro Thr Phe Trp Asp Phe Arg
                                    10
Ser Thr Arg Tyr Thr Ser Phe Cys Leu Ile Asn His Gln Met Ile Asn
            20
                                25
Glu Arg Met Asn Thr Met Tyr Thr Leu Cys Ile Pro Glu Asn Lys Val
                                                45
                            40
Tyr Met Ala Tyr Tyr Thr Asp Leu Ser Ile Asn Tyr Leu Leu Asp Val
                        55
Tyr His Val Tyr Leu Ser Pro Tyr Leu Ser Glu Leu His Ser Leu
                   70
<210> 10618
<211> 74
<212> PRT
<213> Enterobacter cloacae
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<400> 10618

Cys Val Ile Thr His Lys His Ile Thr Ser Gly Val Ile Asp Val Ser 1 5 10 15 Thr His Lys Asn Glu Arg Arg Gly Asn Pro Pro Phe Gln Phe Arg Leu

25 Asp Pro Glu Leu Arg Glu Met Met Glu Arg Ala Gln Gln Asp Gly 40 Asp Glu Ser Leu Ala Ala Trp Leu Lys Arg Ile Ile Arg Lys Glu Leu 55 Gln Gln Arg Gly Ile Glu Pro Lys Gly <210> 10619 <211> 96 <212> PRT <213> Enterobacter cloacae <400> 10619 Asn Gly Lys Leu Ser Cys Arg Gly Gly Ser Gln Pro Gly Gln Ser Gly Ile Gly Ile Ser Gly Glu Ser Gln Gly Gln Ala Met Thr Ala Ile Tyr Asn Leu Val Arg Cys Ser Asp Gly Lys Thr Val Phe Ser Phe Pro 40 Ala Gly Gly Arg Tyr Leu Val Asp Thr Ser Asn Gly Leu Gln Ser Met Arg Pro Leu Met Asp Asn Glu Ile Leu Phe Thr Val Glu Ser Ala Ala 70 Arg Phe Leu Lys Lys Ile Gly Tyr Gln Val Ile Pro Pro Ala Ser 85 90 <210> 10620 <211> 99 <212> PRT <213> Enterobacter cloacae <400> 10620 Pro Gly Asn His Pro Asn Leu Ser Pro Ala Gly Glu Gln Gly Arg Gly Tyr Pro Asp Thr Pro Arg Tyr Gly Gly Lys Arg Met Lys Lys Pro Thr Gln Asn Glu Ser Ile Ala Met Leu Thr Thr Ser Ala Gly Gln Ala Leu Glu Tyr Ser Arg Gln Ala Leu Ala Val Leu Asp Met Trp Ile Asp Thr Leu Ala Pro Asp Asp Glu Met Glu Ser Phe Arg Val Ala Ala Val His 75 Ser Leu Val Ser Gln Ala Ser Glu Tyr Leu Val Lys Val Arg Glu Val Arg Pro <210> 10621 <211> 80 <212> PRT <213> Enterobacter cloacae <400> 10621 Ile Ala Ile Asn Cys Ser Ile Val Ala Ile Asn Gly Ile Leu Thr Ile 10 Ala Ile Thr Gly Gly Ile Met Thr Lys Val Asn Val Lys Pro Val Leu 25 Leu Asn Arg Glu Gln Ile Gln Ala Leu Lys Thr Ile Gln Glu Arg Glu 40

Arg Gln Lys Ser Gly Met Gly Ile Ala Pro Ser Ile His Ala Val Ala

55 Arg Lys Val Phe Asp Ala Gly Leu Ser Lys Met Glu Ala Gly Gln <210> 10622 <211> 478 <212> PRT <213> Enterobacter cloacae <400> 10622 Arg Lys Met Ala Met Asn Lys Lys Ala Glu Arg Arg Asp Phe Tyr Pro Ala Glu Ser Met Leu Asn Gln Pro Phe Gly Ser Ile Pro Arg Cys Trp Ser Ser Leu Arg Ile Ile Leu Leu Ser His Ala Ala Arg Asp Ser Ser Pro Ser Cys Cys Cys Ala Arg Ser Ile Ile Ser Arg Ser Ser Gly 55 Ser Ser Leu Asn Trp Asn Gly Gly Leu Pro Arg Leu Ser Phe Leu Cys 70 75 Val Asp Thr Ser Ile Thr Pro Asp Val Met Cys Leu Cys Val Met Thr 85 His Tyr Thr Gln Glu Met Lys Lys Thr Thr Pro Arg Ser Ala Gly Thr 100 105 Leu Ser Gly Arg Leu Thr Lys Thr Leu Val Glu Val Thr Leu Trp Leu 115 120 Ala Leu Ser Leu Pro Lys His Ala Leu Asn Leu His Gly Val Phe Ser 135 140 Pro Trp Val Asn Ser Gln Ile Arg Ser Ser Met Leu Leu Pro Pro 150 155 Ser Ala Lys Pro Ala Lys Lys Arg Gln Lys Asp Val Ser Val Phe Trp 165 170 Arg Val Asp Phe Val Leu Arg Arg Cys Ser Met Phe Asn Leu Gln Thr 180 185 Leu Thr Ala Lys Ala Arg Glu Leu Arg Gly Asn Val Val Lys Ala Thr 200 Thr Thr Lys Gly Thr Arg Thr Met Thr Pro Val Tyr Glu Arg Glu Glu 215 220 Gln Arg Lys Leu Arg Glu Arg Ile Gln Gln Thr Gln Pro Asp Trp Val 230 235 Leu Leu Trp Trp Asp Ile Ala Thr Val Thr Gly Trp Arg Thr Ser Asp 245 250 Val Cys Asn Phe Arg Tyr Ser Cys Ile Asn Trp Glu Thr Gly Ile Ala 265 Thr Ile Ile Val Ala Lys Gln Thr Lys Ala Ala Glu Ala Arg Ala Thr 280 Arg Lys Gly Ile Glu Ile Val Arg Gln Gln Arg Lys Asp Ala Ala Arg 295 Leu Ala Gly Asp His Ile Gly Tyr Met His Trp Asp Ser Val Ser Cys 310 315 Asp Glu Leu Ala Ala Gly Met Thr Glu Glu Glu Gln Ala Ile Val Phe 325 330 Glu Leu Val Ala Lys Ala Glu Val Lys His Asp Thr Lys Gln Leu Pro 345 350 Pro Gly Ile Ile Lys Arg Leu Arg Glu Arg Met Glu Arg Asn Leu Ile 360 Gly Asp Asp Leu Val Phe Ser Arg Ser Gln Ile Glu Ser Asn Arg Cys 375 380 Gln Ser Leu Glu Gly Ser Val Ser Arg Gln Thr Ile Trp Lys Lys Leu 390 395 His Asn Val Met Val Trp Phe Thr Arg Val Val Asn Lys Arg Leu Arg

<400> 10625

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405
                                    410
Leu Ser Ala Tyr Ser Ser Arg Lys Ile Ala Ala Phe Asn Leu Met Ser
            420
                                425
Ala Gly Gly Glu Gln Gly Leu Leu Val Ala Ser Glu Met Leu Gly His
                            440
Ser Asn Pro Ala Ile Thr Arg Thr Tyr Leu Gln Leu Gly Ser Lys Ala
                        455
Ala Ala Ile Gln Thr Arg Leu Ala Met Glu Val Asn Ala
                    470
<210> 10623
<211> 124
<212> PRT
<213> Enterobacter cloacae
<400> 10623
Thr Gln Asn Glu Lys Lys Ala Ala Ile Ser Lys Lys Leu Ser Ala Ala
                                    10
Phe Val Asp Glu Phe Tyr Leu Trp Gln Ala Gly Asn Leu Ser Cys Asp
            20
                                25
Ser Ser Arg Leu Leu Cys Pro Ser Leu Arg Lys Tyr Phe His His Phe
        35
                            40
Val Ile Ala Ile Phe Leu Leu Glu Phe Lys Met Lys Arg Thr Leu
                        55
Asn Gln Leu Thr Leu Val Ile Gln Gln Pro Leu Pro Ala Asp Asn Asn
                    70
                                        75
Gly Thr Ile Ile Ala Ala Met Glu Ser Arg His Val Asn Ile Gln Ser
                                    90
Val Leu Ile Ala Ser Gln Arg Leu Arg Gly Asn Asp Pro Thr Gly Glu
            100
                                105
                                                    110
Leu Ala Ala Gln Ile Arg His Gln Arg Ile Ala
       115
                            120
<210> 10624
<211> 99
<212> PRT
<213> Enterobacter cloacae
<400> 10624
Asn Arg Arg Asp Ala Ala Arg Cys Val Arg Tyr Cys Thr Gly Ile Leu
                                    10
Met Ser Arg Arg Lys Phe Leu Ile Leu Trp His Ile Tyr Ala Phe Ser
Tyr Leu Cys Ile Phe Ile Ala Phe Phe Ala Val Val Pro Glu Val Lys
Leu Phe Asp Tyr Leu Ser Ile Lys Tyr Gly Phe Ile Asp Ile Glu Arg
Trp Asp Ile Tyr Tyr Ser Ile Phe Ala Met Ser Thr Thr Val Ile Ile
                    70
                                        75
Asn Phe Leu Phe Ile Leu Leu Thr Phe Arg Phe Thr Ser Lys Thr Lys
Lys Lys
<210> 10625
<211> 71
<212> PRT
<213> Enterobacter cloacae
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Ser Ile Asn Glu Pro Glu Phe Met Gly Val Ala Asp His His Glu Ser

<210> 10626 <211> 78 <212> PRT

<213> Enterobacter cloacae

<210> 10627 <211> 64 <212> PRT <213> Enterobacter cloacae

<210> 10628 <211> 165 <212> PRT <213> Enterobacter cloacae



<210> 10629 <211> 104 <212> PRT <213> Enterobacter cloacae

<400> 10629

 Leu Leu Leu Leu Arg
 Phe Lys Met Thr Asp Ser Leu Leu Glu Thr Ile Glu

 1
 5
 10
 15

 Ile Pro Leu Ser Arg
 Pro Tyr Glu Ile Asp Gly Val Ala His Asp Lys
 20

 20
 25
 25
 30

 Leu Thr Met Phe Glu Pro Lys Leu Arg Asp Lys Ile Leu Tyr Ser Lys
 45

 Asp Lys Gly Thr Glu Asp Glu Lys Ser Ala Arg Met Ile Ala Arg Leu
 50

 Leu Asn Val Lys Asp Thr Asp Leu Met Asn Leu Pro Ser Cys Asp Phe

 65
 70

 Arg Arg Leu Glu Asp Ala Phe Asn Glu Met Val Lys Asp Pro Val Asp

 Arg Asp Met Lys Lou Pho Ser

Arg Asn Met Lys Leu Phe Ser 100

<210> 10630 <211> 356 <212> PRT

<213> Enterobacter cloacae

<400> 10630

Gly Tyr Ala Ile Met Gly Val Asn Asp Ser Arg Ile Asn Thr Gly Glu ' 5 10 Gln Pro Trp Leu Pro Asn Phe Phe Ile Ser Val Gly Asp Thr Asp Ile 20 25 Thr Glu Lys Val Arg Lys Gly Leu Ile Asn Ile Ser Leu Asp Asp Tyr 40 45 Gly Gly Ser Asn Lys Gln Thr Asp Gln Ile Lys Val Ala Ile Val Ser 55 Glu Ser Leu Arg Ile Pro Ala Arg Gly Val Lys Val Thr Leu Gly Leu 75 70 Gly Phe Gly Thr Gln Ile Val Asn Lys Gly Val Tyr Val Val Asp Gly 85 90 Gly Ser Ser Gly Gly Glu Pro Arg Ile Val Glu Phe Thr Ala Lys Ala 105 Ala Pro Met Asn Ser Ala Lys Gly Leu Ser Thr Val Gln Ser Lys Lys 120 Thr Arg Ser Trp Thr Gly Asn Thr Leu Gly Asp Ile Leu Ala Lys Val 135 140 Ala Asn Asp Asn Gly Leu Thr Ala Arg Val Ser Ala Gln Phe Ala Gly 150 155 Lys Val Ile Glu Gln Leu Asp Gln Val Gly Glu Ser Asp Ala Asn Leu 170 Val Ser Arg Leu Ala Asp Arg Phe Asp Ala Val Ser Lys Val Ala Gly 185



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Gly Tyr Trp Met Phe Leu Pro Arg Gly Ala Gly Glu Ser Ala Ser Gly
                            200
Lys Pro Leu Lys Gln Tyr Thr Leu Val Arg Thr Gly Asn Ser Gln Trp
                        215
                                             220
Asn Tyr Ser Arg Asn Gly Arg Ser Gly Asp Ser Gly Asp Asn Ser Asp
                    230
                                         235
Gly Ser Lys Asp Thr Ser Thr Phe Val Ile Lys Tyr His Asp Gln Ser
                245
                                    250
Thr Gly Thr Ile Lys Glu Leu Arg Ser Gly Ser Gly Glu Pro Val Ile
                                265
            260
                                                     270
Glu Ala Pro Phe Val Glu Pro Ser Leu Ala Ala Gln Glu Leu Leu
                            280
                                                 285
Pro Gly Ala Ser Ser Ser Lys Lys Glu Ile Thr Met Ser His
    290
                        295
                                             300
Ser Met Pro Ala Thr Gln Asp Leu Leu Ser Leu Thr Ala Glu Cys Lys
                    310
                                         315
Ile Thr Thr Lys Gly Phe Gly Pro Asp Glu Asp Arg Ser Trp Thr Ile
                325
                                    330
Asn Thr Leu Asn Met Thr Leu Gly Glu Ser Gly Phe Ser Val Arg Leu
                                345
Gln Leu Glu
        355
<210> 10631
<211> 66
<212> PRT
<213> Enterobacter cloacae
<400> 10631
Cys His Ser His Ile Ser Ser Leu Leu Ser Ile Lys Asn Asn Val Tyr
                                    10
Ile Gly Phe Phe Tyr Gly Arg Arg Trp Phe Lys Arg Arg Phe Met Val
                                25
Val Gly Asn Pro His Lys Phe Arg Leu Val Tyr Ala Ser Tyr Ala Lys
                            40
                                                45
His Glu Arg Asp Ile Phe Phe Tyr Tyr Lys Arg Ser Leu Ser Val Leu
Phe
65
<210> 10632
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 10632
Gly Leu Val Ala Glu Gly His Ser Ser Tyr Leu Ile Ile Arg Asn Ile
                                    10
Arg Cys Ile Leu Asn Ala Ser Leu Ser Gly Tyr Tyr Asn Pro Leu Glu
                                25
Ala Arg Val Lys Thr Arg Lys Gly Ser Gln Lys Lys His Ala Phe Asn
                            40
Leu Leu Ile Glu Cys Arg Lys Gly Leu Ser Lys Val Phe Lys Gly Gly
                        55
Glu Thr Val Asn Asn Pro Pro Arg Val Pro Ile Asp Thr Gly Gln Thr
                    70
Leu Pro Val Tyr Lys Lys Gly Asn Ala Cys Leu Asn Val
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<210> 10633 <211> 69

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<212> PRT
<213> Enterobacter cloacae
<400> 10633
Arg Asn Ser Asn Lys Gln Thr Ala Phe Gln Arg Tyr Ile Leu Arg Ser
                                    10
Val Lys Ile Asp Asp Leu Phe Thr Gly Val Leu Met Ser Leu Pro Ala
                                25
Leu Ile Ala Lys Lys Cys Asp Arg Thr Gln Ile Phe Ser Glu Gln Ile
                            40
                                                45
Ser Gln Ile Ser Cys Leu Thr Val Leu Phe Val Arg Thr Ala His Pro
                        55
Asn Arg Leu Pro
<210> 10634
<211> 81
<212> PRT
<213> Enterobacter cloacae
<400> 10634
Arg Arg Ala Ser Ala Thr Arg Phe Leu Ser Thr Lys Thr Ser Arg Lys
Thr Ala Ser Gly Gly Gly Tyr Val Leu Pro Asp Leu Asn Thr Pro Gln
            20
Ala Arg Val Ser Glu Ala Pro Ser Gly Lys Lys Ala Gly Asp Ile
Ala Ser Gly Phe Phe Val Pro Ala Ile Gln Thr Ile Ser Cys Ala Tyr
Trp Asn Ser Ala Phe Ser Ser Ala Cys Phe Ser Ala Phe Pro Ser Tyr
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Ser Trp Asn Lys Lys Val Gly Arg Ala Ala Glu Ser Asp Thr Ser Asn
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Leu Ile Leu Lys Val Asp Val Ser Met Val Asn Asp Trp Gly Glu
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Gln Ser Glu Gln Lys Ala Pro Ser Gly Lys Lys Phe Ala Arg Phe Val
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Pro Lys Lys Ser Ala Phe Cys His Ile Phe Leu Gln Leu Arg Gln Val
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Thr Thr Ser Glu Leu Pro
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<213> Enterobacter cloacae
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Ala Phe Ile Met Gln Lys Phe Pro Phe Lys Gly Ile Asn Leu Cys Leu
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Asn Glu Gly Ile Asn Gly Thr Leu Ala Thr Pro Arg Arg Lys Asn
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Leu Val Leu Arg Gln Phe Val Glu Asp Arg Tyr Glu Lys Thr Gly Val 40 Val Thr Phe Ser Gly Thr Gly Phe Phe Gln Arg His Arg Gly Ile Arg 55 Ser Asn Ser Ala Glu Asn Ser Tyr Trp Asn <210> 10637 <211> 68 <212> PRT <213> Enterobacter cloacae <400> 10637 Asp Asn Met Glu Arg Asn Ala His Arg Leu Thr Leu His Ser Pro Ala 10 Gly Val Ile Leu His Leu Thr Trp Ser Glu Phe Ile Asp Phe Ala Gln Leu Lys Cys Arg Phe Glu Ala Asp Ser Ala Ser Glu Lys Arg Lys Phe 40 Thr Ala Ile Tyr Tyr Asp Ala Thr Thr Met Gln His Pro Gln Ser Lys 55 Pro Leu Thr <210> 10638 <211> 113 <212> PRT <213> Enterobacter cloacae <400> 10638 Phe Asn Gly Leu Thr Gly Asn Met Leu Met Ser Val Asn Thr Glu Thr Ala Ser Ala Gln Gly Gln Thr Thr Val Leu Glu Lys Glu Gly Val Tyr Ala Ser Leu Phe Glu Lys Ile Asn Leu Thr Pro Ala Ser Ser Leu Gly Asp Ile Asn Ala Phe Leu Asp Asp Ala Ala Leu Ser Asp Ala Pro Ala 55 Gly Glu Arg Leu Thr Ala Ala Met Gln Val Phe Met Asp Cys Ile Arg 75 Lys Ser Gly Tyr Gln Cys Cys Arg Ser Gly Met Ala Asp Asp Ala Cys 85 Ala Arg Phe Gly Ala Asn Ala Gly Arg Val Pro Gly Ser Tyr Thr 100 105 <210> 10639 <211> 218 <212> PRT <213> Enterobacter cloacae <400> 10639 Arg Arg Cys Arg Cys Leu Trp Thr Ala Ser Ala Asn Pro Val Thr 10 Ser Val Val Ala Val Gly Trp Gln Met Met His Ala Pro Asp Ser Ala Gln Met Gln Leu Ala Ala Ser Leu Ala Pro Ile Pro Glu Gly Leu Ser Thr Ala Gln Leu Gln Ala Leu Gln Gln Thr Ser Pro Pro Glu Pro

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Gly Ile Ser Lys Thr Gln Gln Met Leu Ala Gln Leu Leu His Leu Lys
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                                        7.5
Pro Asp Trp Ala Val Ser Tyr Gly Asp Arg Leu Val Gln Gln Ala Leu
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                                    90
Thr Leu Trp Pro Glu Glu Ala Lys Ser Leu Ala Gln Gln Trp His Thr
                                105
Gln Ile Ser Val Ala Gly Leu Ala Glu Ser Asp Leu Asn Gly Trp His
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Gln Gly Met Thr Gln Leu Gln Gln Leu Thr Asn Arg Leu Asn Ala Leu
                        135
                                            140
Asp Glu Gln Lys Gly Lys Tyr Met Thr Val Ser Glu Leu Lys Ser Ala
                    150
                                        155
Val Phe Ala Met Ser Gln Ser Phe Ser His Thr Val Pro Leu Glu Glu
                165
                                    170
Gln Leu Arg Leu Ser Ile Leu Pro Ala Gly Gln Pro Leu Ser Ala
            180
                                185
Ala Gln Leu Lys Gln Thr Glu Gln His Leu Gln Gln Leu Ile Ala Ser
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                                                205
Tyr Ala Leu Leu Lys His Gln Lys Glu
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Met Gln Arg Gln Ala Met Gly Val Ala Leu His Ile Val Leu Leu Pro
Phe Phe Glu Leu His Ser Thr Ile Asp Ser Tyr Asp Ala Asp Phe
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Ile Val Gly Phe Phe Leu Pro Pro Asp Tyr Leu Arg Leu Pro Phe Arg
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Gly Gln His Pro Asn Leu Glu Glu Lys Met Ser Ile Leu Leu Ala Leu
Gln Arg Leu Asn Thr Trp Gln Ser Asp Pro Val Pro Thr Asp Pro Thr
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                                        75
Pro Ile Pro Asp Pro Val Pro Arg Pro Gln Pro Met Pro Asp Pro Pro
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Pro Asp Glu Glu Pro Ile Lys Leu Ser His Arg
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<210> 10641
<211> 178
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Ser Thr Lys Lys Asn Asn Glu Thr Gly Glu Lys His Gly Val Asp Met
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Ser Ala Arg Glu Arg Phe Phe Lys Lys Val Gln Gln Ser Ile Gly Asp
                                25
Lys Pro Ile Tyr Val Asn Thr Ala Glu Ala Glu Val Arg Ala Phe Cys
                            40
                                                45
Glu Arg Met Glu Asp Leu Ala Gln Gln Ile Ile Thr Trp Phe Glu Gly
                        55
                                            60
Ser Gly Ile Glu Ile Phe Leu Ser Lys Lys His Ile Thr Asp Leu Ser
                    70
                                        75
Thr Val Gly Tyr Ser Leu Ser Ser Gly Ile Cys Arg Tyr Ala Ile Thr
                                    90
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Thr Ile Ile Leu Gln Asn Gly Asp Arg Ser Val Thr Ile Met Pro Glu

100 105 110 Gln Val Ile Arg Gly Ser Glu Lys Gly Cys Val Thr Met Ser Ile Asn 120 Val Pro Asp Ser Leu Ser Gly Ala Arg Ile Phe His Leu Ser Met Ala 135 Pro Glu Thr Gly Trp Tyr Ile Arg Arg Gly His Gln Ser Ala Lys Glu 150 155 Asn Ile Leu Met Thr Glu Asp Cys Phe Phe Gln Ala Ile Asp Cys Leu 170 Ala <210> 10642 <211> 103 <212> PRT <213> Enterobacter cloacae <400> 10642 Ser Lys Tyr Pro Phe Lys Ser Trp Lys Ile Phe Asp Leu Asn Cys Val 10 Lys Met Ser Lys Leu Thr Phe Arg Arg Val Asn Lys Arg Arg Lys Ile 20 25 Asp Glu Tyr Arg Ser Glu Val Phe Ala Val Tyr His His Cys Cys Ser 35 40 Cys Ser Asp Cys Cys Arg Trp Phe Asn Arg Cys Thr Ala Leu Ile Gln 55 Ala Glu Gly Glu Pro Ser Pro Ser Leu Ala Ala Ile Val Thr Ser Pro 70 75 Ala Lys Ile Phe Cys Gln Asn Val Asn Phe Ser Phe Phe Val Ile Asp 85 90 Val Met Leu Leu Thr Ser 100 <210> 10643 <211> 77 <212> PRT <213> Enterobacter cloacae <400> 10643 His His Ala Lys Asp Pro Ser Leu Gln Glu Ile Lys Met Lys Ala Ile Ser Phe Val Glu Ala Lys Asp Ile Ile Gly Gly Ala Leu Asn Pro Phe Ala Gly Leu Val Lys Gly Ala Gln Leu Gly Tyr Asp Thr Gly Ala Ser Ile Met Gly Met Val Gly Gly Val Gly Gly Val Leu Gly Gly Ala 55 Met Gly Phe Leu Gly Ala Leu Val Gly Ser Tyr Asn <210> 10644 <211> 163 <212> PRT <213> Enterobacter cloacae <400> 10644 Asn Met Ser Arg Thr Lys Met Ser Val Leu Phe Ser Ile Val Leu Ala 10 Leu Ser Val Ile Ala Leu Leu Trp Ile Tyr Phe Thr Arg Thr Gln Asp 25

Glu Gly Phe Gly Cys Gln Ser Asp Thr Ile Ser Trp Lys Thr Tyr Ser

40 Thr Gly Glu Ser Thr Asp Met Ser Leu Thr Thr Leu Phe Leu Phe Asn 55 60 Asn Lys Asp Val Val Thr Val Ile His Lys Gly Val Leu Lys Lys Glu 70 75 Gly Lys Ser Tyr Leu Ile Asp Arg Asn Tyr Thr Leu Ile Val Glu Glu 90 Val Asp Gly Ser Asn Ile Phe Tyr Ile Lys Asp Lys Leu Asn Lys 100 105 Ser Glu Asp Asp Ala Ala Pro Asp Gly Val Val Asn Glu Met Leu Leu 120 Asp Asn Ile Asn Phe Phe Tyr Ile Thr Ser Val Lys Lys His Ala Trp 135 140 Leu Ile Lys Gly Leu Val Leu Pro Val Met Met Cys Val Ala Val Pro 145 150 155 Thr Ser <210> 10645 <211> 73 <212> PRT <213> Enterobacter cloacae <400> 10645 Leu Gln Leu Ile His Val Asn Arg Lys Ser Ile Met Gln Val Ile Asp Phe Lys Lys Ala Gln Ala Ile Ile Gly Gly Trp Asp Pro Phe Ala Ala 20 25 Ala Ile Gln Gly Ala Ser Ala Gly Tyr Asn Ala Gly Ser Gln Met Leu 40 45 Gly Ala Leu Gly Gly Thr Ile Gly Gly Val Phe Gly Leu Val Gly Gly 55 60 Phe Ile Gly Gly Phe Phe Ser Ala <210> 10646 <211> 78 <212> PRT <213> Enterobacter cloacae <400> 10646 Ile Leu Pro Arg Asn Ser Ser Ala Arg Asp Leu Ser Ile Ser Ile Thr 10 Leu Thr Arg Gln Lys Val Pro Met Val Phe Pro Ser Ser Thr Val Ala Ala Gly Ala Ser Ile Phe Ala Gly Cys Val Glu Glu Ser His Ala Val 40 Arg Ser Lys Lys Val Ala Arg Thr Leu Ala Arg Lys Lys Val Ile Ser . 60 55 Ile Gly Tyr Tyr Pro His Ala Arg Ala Ala Arg Val His . 70 <210> 10647 <211> 91 <212> PRT <213> Enterobacter cloacae <400> 10647 Arg Ser His Gly Val Ala Ile Tyr Ser His Glu Lys Tyr Leu Ser Thr

10

Asp Pro Gly Ala Glu Ser Ser Ile Leu Ser Ala Ala Gln Arg Ile Ile

20 25 Val Ser Cys Arg Lys Glu Ser Arg Lys Ala Glu Glu Thr Gln Lys Gly 40 Lys Ser Cys Pro Phe Ser Gly Gly Glu Arg Ala Tyr Ala Gly Gly Thr 55 Ser Val Thr Gly Ser Ala Gly Lys Arg Val Leu Pro Val Ser Val Thr 70 Ala Ala Pro Glu Arg Pro Pro Ala Ser Phe <210> 10648 <211> 83 <212> PRT <213> Enterobacter cloacae <400> 10648 Phe Asn Pro His Ser Ser Val Ile Gly Arg Cys Pro Ala Glu Gln Ile Ile Gln Ile Pro Cys Gln Leu Phe Ile Leu Leu Ile Leu Leu Asn Val Ile Asp Ile Tyr Pro Ser Ser Gly Tyr Ser His Leu Val Asn Ile Thr 40 Lys Glu Trp Leu Ile Ser Ser Trp Leu Asn Ile Lys Ile Ile Cys Leu Ala Lys Pro Thr Ala Ser Trp Lys Cys Leu Asn Arg Phe Arg Ala Ser 70 Arg Arg <210> 10649 <211> 114 <212> PRT <213> Enterobacter cloacae <400> 10649 Lys Pro Leu Arg Pro Ser Thr Ala Thr Ser Leu Met Tyr Val Ala Leu 10 Val Pro Tyr Ser Pro Pro Thr Asp Ser Pro Trp Asn Arg Arg Ala Ser 25 Asn Ser Asn Ala Gly Ala His Val Pro Ile Val Ser Tyr Pro Gly Lys 40 45 Gln Ala Ile Thr Ser Glu Pro Thr His Ile Met His Thr Glu Met Ser 55 Met Asp Val Leu Arg Pro Phe Leu Ser Ala Ile Leu Pro Asn Ser His 70 75 Pro Pro Met Gly Arg Ile Arg Asn Pro Ala Ala Lys Thr Pro Ala Val 85 90 Cys Arg Ser Cys Val Val Phe Pro Asp Gly Lys Lys Ile Cys Ala 100 105 Lys <210> 10650 <211> 159 <212> PRT <213> Enterobacter cloacae <400> 10650

Asn Asn Phe Asn Asn Gly Ala Ala Leu Thr Arg Pro Phe Asp Tyr Gln Gln Asp Phe Ala Asn Ile Asn Phe Arg Glu His Pro Glu Arg Tyr Gln

25 Val Gly Arg Gly Glu Gln Gly Val Leu Met Val Glu Pro Tyr Lys Ser 40 Glu Ile Leu Pro His Trp Arg Tyr Lys Asn Ala Glu Val Ala Ala Arg 55 Ser Ala Glu Glu Ile Tyr Ala Leu Phe Glu Glu Tyr Arg Arg Asn Asn 70 75 Asp Phe Val Gly Met Asp Met Ala Arg Lys Phe Ile Gln Met Gly Tyr 90 85 Thr Arg Ala Arg Arg Tyr Ala Asn His Lys Gly Gly Lys Lys Tyr Asp 100 105 Glu Lys Arg Gln Val Lys Pro Leu Asp His Asp Pro Val Lys Ala Glu 120 125 115 Ala Ala Val Phe Lys Thr Cys Trp Asp Lys Ile Arg Ala Asp Glu 135 140 Asp Tyr Leu Gln Arg Lys Lys Ala His Gln Gln Ala Trp Gly 150 <210> 10651 <211> 154 <212> PRT <213> Enterobacter cloacae <400> 10651 Tyr Arg Lys Arg Lys Cys Cys Met Ser Asp Lys Asn His His Thr Thr Trp Glu Glu Leu Leu Glu Glu Tyr Phe Phe Ala Arg Asn Leu Arg Ala Ala Thr Glu Trp Ser Tyr Thr Lys Val Val Lys Gly Phe Leu Lys Phe 40 Met Gly Ala Gly Lys Thr Pro Leu Met Val Thr His His Glu Ile Leu Arg Trp Arg Arg His Val Leu Arg Glu Lys Gln Gln Ser Ala Gln Thr Trp Asn Asn Lys Ile Ala His Leu Arg Ala Leu Tyr Asn Tyr Ala Met Glu Ser Gly Leu Leu Pro Glu Gly Arg Asn Pro Phe Asn Asn Cys Thr 105 Val Gln Arg Asp Arg Lys Lys Lys Arg Thr Leu Thr Arg Ser Gln Leu 120 125 115 Thr Arg Leu Tyr Leu Ile Met Gln Gln Ala Glu Ile Glu Ser Asn Arg 135 Ser Ala His Gln Arg Gln Arg Ser Ala Ser 150 <210> 10652 <211> 81 <212> PRT <213> Enterobacter cloacae <400> 10652 Glu Phe Phe Ser Pro Lys Thr Gln Phe Ser Pro Leu Gly Gly Leu 10 Lys Leu Gly Pro Lys Gly Tyr Gly Cys Ser Pro Phe Lys Val Val Arg 25 Glu Leu Gly Leu Glu Arg Arg Glu Thr Val Arg Ser Ile Ser Ala Val 40 Gly Ala Gly Glu Leu Arg Gly Val Ala Pro Ser Thr Arg Gly Pro Glu Trp Thr His His Trp Cys Ser Gly Cys His Ala Asn Gly Thr Ala Arg

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<211> 66
<212> PRT
<213> Enterobacter cloacae
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Gly Ile Lys Ala Met Pro Leu Ser Ala Gln Gln Leu Ala Ala Gln Lys
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Asn Leu Ser Tyr Val Leu Ala Glu Lys Leu Ala Gln Leu Ile Leu Ala
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                                25
Gly Lys Tyr Ala Pro Gly Ser Ile Leu Ala Pro Lys Xaa Gly Lys Arg
        35
                             40
Trp Ser Trp Glu Ile Ser Leu Ala Leu Ala Val Gln Pro Phe Ala Lys
                        55
Arg
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<210> 10654
<211> 114
<212> PRT
<213> Enterobacter cloacae
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Lys Asn Ser Asn Asn Val Ile Ala Asn Gly Gly Ile Met Asn Val His
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Leu Lys Tyr Asp Thr Ile Lys His Tyr His Phe Asp Trp Leu Thr Pro
            20
                                25
Ala Gly Asp Tyr Pro Asn Ser Ala Val Met Leu Val Gly Phe Arg Asp
                             40
Gly Arg Trp Ile Ile Val Gln Glu Phe Gly Asn Asp Tyr Ser Cys Phe
Glu Gly Val Leu Lys Asn Gly Asp Asp Leu Asn Thr Glu Pro Lys Phe
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Tyr Ser Asp Leu Glu Ser Val Ala Val Ala Ala Phe Gly Met Met Lys
Gln Ile Tyr Pro Gln Tyr Gln Asp Ser Thr Leu Glu Glu Phe Leu Ala
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Gly
<210> 10655
<211> 136
<212> PRT
<213> Enterobacter cloacae
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Glu Asp Asn Thr Arg Ser Asp Asn Lys Val Val Ser Met Ile Val Gly
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Ser Asn Gly Ser Thr Phe Glu Lys Gly Arg Gln His Tyr Lys Ile His
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Gln Gln Cys Thr Gln Ile Asn Tyr Trp Tyr Leu Lys Met Lys Val Lys
                            40
Glu Leu Ile Ala Met Leu Asn Glu Arg Asp Pro Glu Ala Ile Val Leu
                        55
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<210> 10656 <211> 119 <212> PRT

<213> Enterobacter cloacae

<400> 10656

 Val
 Lys
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 Leu
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 Glu
 Gln
 Leu
 Asn
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 Thr
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 Gly
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 Lys
 Cys
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 Ser
 Cys
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 Val
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Ser Met Lys Lys Leu Lys 115

<210> 10657 <211> 487 <212> PRT

<213> Enterobacter cloacae

<400> 10657

Asn Met Lys Val Thr Ile Asp Gly Val Ser Tyr Ala Pro Val Cys Asn Ala Gly Ala Arg Ile Gly Ile Ala Ile Thr Thr His Asn Arg Ala Asp Ala Leu Lys Arg Ala Leu Ala Gln His Gln Gln Phe Leu Pro Gln Gly Ala Leu Val Val Ile Asp Asp Gly Ser Lys Pro Pro Ala Glu Val 55 Phe Glu Asp Val Gln Leu Leu Arg His Glu Thr Ser Leu Gly Ile Val 70 75 Ala Ser Lys Asn Ala Ser Leu Thr Ala Leu Met Asp Ala Gly Cys Glu 90 85 His Leu Phe Leu Trp Asp Asp Asp Ala Trp Pro Ile Ala Asp Asn Trp 100 105 His Leu Pro Tyr Ile Glu Ser Pro Glu Pro His Leu Ala Tyr Gln Phe 120 Leu Asp Leu Ala Gly Thr Asn Lys Leu Lys Asp Met Ala Ile Leu Tyr 135 140 Arg Asp Asp Lys His Ile Ala Tyr Thr Gly Gln Arg Gly Val Met Leu 150 155 Tyr Tyr His Arg Ser Ala Ile Glu Lys Val Gly Gly Phe Asp Pro Val

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165
                                    170
Tyr Arg Arg Met Tyr Glu His Ser Asp Leu Ala Leu Arg Ile His
            180
                               185
                                                   190
Asn Ala Gly Leu Thr Trp Ala Tyr Gly Asp Val Val Gly Ser Glu
                            200
                                                205
Lys Leu Ile His Ser Leu Asp Glu His Glu Ala Val Glu Arg Ser Val
                        215
                                            220
Pro Arg Pro Asp Arg Gln Ala Leu Val Glu Arg Asn Val Lys Ile His
                    230
                                        235
Asn Glu Arg Arg Asp Ala Gly Phe Thr Gly Tyr Ala Glu Tyr Arg Gln
                245
                                    250
Gln Arg Asp Val Val Ile Thr Thr Leu Leu Thr Ser Gln Pro Asp Pro
            260
                                265
Gln Arg Gly Thr Lys Met Ala Ala Ser Pro Asp Met Leu Ser Lys Trp
                            280
                                                285
Ala Ala Ser Leu Arg Gln Cys Gly Arg Ile Ala Leu Val Asp Glu Leu
                        295
                                            300
Leu Thr Ala Pro Ala Asp Val Glu Leu Tyr Leu Val Pro Asp Val Lys
                    310
                                        315
Met Asn Val Tyr Phe Arg Arg Trp Leu His Ile Trp Gln His Leu Arg
                                    330
                325
Asp His Pro Glu Tyr Arg Phe Val Trp Cys Thr Asp Gly Thr Asp Val
            340
                                345
Glu Met Leu Arg Ala Pro Trp Glu Glu Met Gln Pro Gly Thr Val Tyr
                            360
                                                365
Val Gly Ser Glu Pro Lys Thr Tyr Ala Asp Thr Trp Ala Lys Gln Asn
    370
                        375
                                            380
His Pro Glu Arg Ile Tyr Gln Glu Phe Ile Glu Ser His Arg Gly Asp
                    390
                                        395
Val Met Leu Asn Ala Gly Leu Leu Gly Gly Thr Arg Ala Asp Val Met
                405
                                    410
Ala Phe Ala His Gly Ile Ile Arg Leu Tyr Tyr Arg Ile Glu Ser Tyr
                                425
Arg Phe Trp Lys Lys Glu Gln Ala Gly Ala Ala Val Gly Asp Met Leu
        435
                            440
                                                445
Ala Phe Gly Ile Val Ala His Ser Phe Ala Gly Lys Val Ile Thr Gly
                        455
Pro Gln Val His Thr Val Phe Lys Thr Asp Gly Ile Gly Lys Asp Asn
                    470
                                        475
Ala Trp Trp Lys His Lys
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<210> 10658

<211> 271

<212> PRT

<213> Enterobacter cloacae

<400> 10658

Ala Ser Ile Gln Leu Asn Gln Phe Ser Tyr Gln Tyr Asp Asn Glu Phe 10 Leu Phe Leu Thr Ser Leu Asp Thr Pro Tyr Arg Leu Lys Ser Val Asp 20 25 Ser Gly Arg Cys Ala Leu Thr Asn Pro Phe Ser Ile Ser Leu Asn Val 40 45 Trp Ser Arg Val Met Gly Ile Leu Thr Phe Asp Ile Thr Cys Pro His 55 60 Cys Leu Arg Glu Asn Ala Val Leu Glu Gly Trp Ala Glu Leu Arg Ile 70 75 Asn Ala Gly Pro Leu Val Asn Val Ala Phe Ser Cys Arg Ser Cys Phe 85 90 Gln Ala Gly Ile Ala Met Val Lys Met Asn Asn Pro Val Gly Phe Ser

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100
                                105
                                                     110
Pro Leu Ser Lys Ser Lys Gln Asn Lys Asp Val Asn Val Ile Ile Pro
                            120
                                                125
Gly Asn Leu Glu Tyr Gln Leu Ile Asp Val Phe Pro Lys Pro Ile Thr
                        135
                                            140
Leu Ser Ala Pro Asp His Thr Pro Ser Arg Ala Ala Met Ala Phe Val
                    150
                                        155
Glu Ala Lys Asp Asn Leu Gly Arg Gly Arg Phe Asp Thr Ser Val Met
                                    170
Leu Cys Arg Lys Val Leu Asp Ile Ala Thr Arg Glu Leu Leu Gly Asn
            180
                                185
Asp Ser Lys Asp Glu Lys Leu Val Lys Arg Ile Ser Met Leu His Gly
                            200
Lys Gly Leu Ile Thr Asp Gln Met Lys Glu Trp Ala His Ile Val Arg
                        215
                                             220
Ile Asp Ser Asn Gly Ala Val His Ser Asp Glu Glu Phe Ser Lys Glu
                    230
                                         235
Asp Ala Gln Glu Met Ile Gly Phe Thr Glu Val Phe Leu Leu Tyr Ala
                245
                                    250
Phe Thr Leu Pro Asp Met Val Asp Asn Lys Lys Gln Asn Gln
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Lys Ser Arg Thr Met Ala Ala Thr Val Cys Ile Ser Gly Cys Asn Phe
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Ala Leu Thr Arg Val Asn Val Ser Ile Gln Pro Val Ser Gly Gly Thr
            20
                                25
Leu Thr His Ser Gly Thr Glu Glu Trp Leu Ile Thr Ser Asp Lys Glu
                            40
Met Lys Cys Leu Phe Cys Thr Lys Glu Cys Ile Leu Ile Lys Val Ile
    50
                        55
Pro Leu Leu
65
<210> 10660
<211> 64
<212> PRT
<213> Enterobacter cloacae
<400> 10660
Thr Met Arg Phe Tyr Ala Tyr Tyr Trp Phe Leu Asp Lys Thr Met Thr
Asn Leu Pro Glu Arg Gln Lys Thr Pro Glu Ile Arg Leu Ile Trp Thr
                                25
Gly Ala Leu Thr Leu Ala Pro Met Glu Ile Phe Ala Arg Ala Asn Leu
                            40
                                                 45
Cys Val Tyr Lys Leu Val Leu Leu Tyr Asn Pro Phe Thr Leu Ser
<210> 10661
<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 10661
Gly Arg His Cys Pro Arg Ile Lys Pro Thr His Gln Arg Arg Arg Phe
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Arg Val Leu Glu Thr Gly Phe Glu Glu Ser Phe Gly Glu Ile Arg Leu
            20
                                25
Arg His Cys Val Ala Ser Met Asp Thr Ser Tyr Glu Asp His Cys Asn
                            40
                                                45
Ala Trp Gln Gly Lys Lys Asn Asn Ala Arg His Asn Arg Ala Cys Lys
Val Thr Tyr
<210> 10662
<211> 93
<212> PRT
<213> Enterobacter cloacae
<400> 10662
Ser Arg Ser Ser Ala Trp Ala Asp Ala Ala His Ser Asn Thr Pro Ala
Leu Ser Ala Leu Ala Gln Ser Arg Gly Leu Thr Asp Asn Arg Ser Gly
            20
                                25
Phe Met Thr His Val Ile Glu Lys Ile Ala Phe Pro Leu Met Gly Ser
        35
                            40
Asp Tyr Ser Thr Met Asn Ser Gly Leu Pro Val Ile Ser Ser Gly Ile
   50
                        55
                                             60
Ser Ile Pro Ile Ser Asp Asn Met Val Gly Ala Met Ser Glu Ser Leu
                    70
Pro Pro Ser Thr Ala Phe Thr Asp Leu Ser Pro Thr
                8.5
<210> 10663
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 10663
Lys Asn Gln Asp Arg Ser Ile Pro Val Arg Cys Gly Lys Tyr Ser Gln
                5
                                    10
Arg His Lys Ala Asn Leu Phe Ser Ala Ala Cys His Val Lys Lys Ala
                                25
Ser Lys Trp Pro Glu Asn Ser Leu Ala Pro Ala Leu Ser Leu Ile Phe
Cys Gly Tyr Phe Ile Asp Ser Ala Val Val Lys Leu Arg Lys Ile Phe
   50
Val Ser
65
<210> 10664
<211> 214
<212> PRT
<213> Enterobacter cloacae
<400> 10664
Val Ile Phe Tyr Thr Leu Ser Arg Tyr Gly Gly Glu Met Glu Thr Leu
                                    10
Thr Val Gln Ala Tyr Leu Asn Glu Thr Trp Thr Asp Ile Ala Leu Ile
            20
                                25
Lys Tyr Pro Gly Ser Glu Lys Asn Asp Trp Asn Thr Thr Gln Leu Asp
                            40
                                                45
Tyr Leu Thr Glu Tyr Ala Ile Asn Phe Leu Asp Tyr Asp Asp Phe His
Ala Val Ser Val Asn His Pro Val Ser Leu Phe Phe Asp Asp His Gly
```

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70
                                        75
Gln Pro Gly Trp Leu Arg Phe Ile Asp Asp Ile Ile Pro Ala Gly Ala
               85
                                    90
Ser Arg Arg Tyr Trp Ile Asn Ala Leu Asp Ile Ser Glu Leu Pro Val
            100
                                105
Gly Gln Gln Asn Phe Leu Leu Lys Phe Gly Thr Met Ser Pro Val
                            120
Gly Asn Leu Arg Ile Lys Glu Ser Val Pro Glu Trp Asn Lys Phe Ala
                        135
Ser Thr Lys Thr Phe Thr Val Ala Asp Val Ile Asp Arg Ala Ala Asp
                    150
                                        155
Phe Leu Asp Tyr Ala Gln Glu Arg Gly Ala Ala Ala Gly Gly Ala Thr
                                    170
                165
Gly Ala Gly Glu Ala Pro Lys Leu Leu Arg Cys Ser Glu Thr
            180
                                185
Asp Ala Ile Trp Ile Asp Thr Trp Gln Asn Glu Pro Asp Asn Arg Gly
                            200
        195
Pro Leu Leu Phe Gly
    210
<210> 10665
<211> 61
<212> PRT
<213> Enterobacter cloacae
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Arg Arg Asn Leu Arg Leu Leu Thr Phe Arg Phe Leu Val Thr Arg Gly
                                    10
Asn Pro His Ile Val Ile His Phe His Ile Arg Lys Phe Ile Pro Gln
            20
                                25
Asp Asn Glu Leu Ile Ser Cys Ile His Ala Asn Tyr Glu Leu Thr Ala
                            40
Thr Leu Thr Ser Thr Asp Ile Arg Arg Arg Gly Glu
   50
                        55
<210> 10666
<211> 69
<212> PRT
<213> Enterobacter cloacae
<400> 10666
Pro Asp Ser Gly Phe Asn Gln Leu Leu Ala Gly Leu Leu Ser Leu Phe
Phe Leu Phe Ala Arg His Tyr Leu Leu Leu Val Thr Tyr Lys Ile Asp
Thr Leu Ser Lys Asp Ile Ala Val Val Ser Asp Lys Val Leu Thr
Lys Ile Arg Val Ser Phe Ala Gln Lys Lys Ser Ile Arg Leu Ile Tyr
Lys Pro Arg Glu
65
<210> 10667
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10667
Ala Lys Arg His Pro Ala Lys Lys Pro Gly Pro His Arg Glu Gly Phe
                                    10
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Phe Ile Ser Ala Leu Leu Lys Ile Ala Ala Ile Ala Asp Lys Ile Ile

<400> 10670

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20
                                25
Thr Leu Asp Ser His Ala Ser Tyr Thr Leu Glu Leu Phe Ser Leu Trp
                            40
Leu Gly Leu Ser Val Ala Ala Gly Thr Val Thr Ala Ile
                        55
<210> 10668
<211> 74
<212> PRT
<213> Enterobacter cloacae
<400> 10668
Ser Ala Thr Ser Pro Ile Arg Lys His Gly Ile Arg Val Val Arg Leu
                                    10
Asn Pro Asn Gln Ser Arg His Leu Pro Ala Ala Leu Ser Ala Ile Thr
            20
                                25
Val Asn Ser Lys Ser Ile Asn Ala Val Lys Ile Pro Ile Ile Ile Val
                            40
                                                 45
Lys Ile Val Lys Ser Ile Val Ser Asp Ile Gln Leu Thr Glu Pro Leu
                        55
Gln Ser Pro Lys Lys Arg Asp Lys Arg
                    70
<210> 10669
<211> 179
<212> PRT
<213> Enterobacter cloacae
<400> 10669
Gln Lys Ala Leu Arg Gln Pro Gly Cys Arg Lys Leu Gln Glu Cys Asn
                                    10
Lys Ala Tyr Asn Met Lys Gln Leu Thr Phe Asn Asp Leu Arg Lys Gln
Ser Ala Gln Ala Ala Asn Ser Pro Arg Leu Arg Ala His His Asn Phe
His Pro Glu Leu Ser Asp Pro Val Gln Arg Leu Ala Ile Ala Met Glu
Pro Gly Thr Tyr Val Arg Pro His Arg His Pro His Thr Phe Glu Leu
                                         75
Leu Thr Ser Leu Thr Gly Arg Phe Leu Val Leu Asn Phe Asp Asp Leu
Gly Asn Leu Thr Gln Arg Val Val Leu Gly Glu Asp Cys Lys Val Leu
                               .105
Glu Met Asp Ala Gly Thr Trp His Thr Val Leu Ser Leu Asp Glu Gly
       115
                            120
                                                 125
Gly Val Ile Phe Glu Val Lys His Gly Arg Tyr Gln Pro Val Ala Asp
                        135
                                            140
Gln Asp Ala Ala Pro Trp Ala Pro Ala Glu Asn Glu Pro Gly Thr Ala
                    150
                                        155
Glu Leu Met Lys Trp Tyr Thr Gln Ala Gln Val Gly Asp Gly Gly Tyr
                165
                                    170
Pro Arg
<210> 10670
<211> 131
<212> PRT
<213> Enterobacter cloacae
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Asp Glu Ala Ser Met Thr Ser Thr Leu Asp Pro Ser His Lys Gln Ile

<212> PRT

```
Glu Met Trp Arg Arg Ala Thr Gly Ser Glu Gly Gly Leu Asn Glu Tyr
                                25
Arg Asn Trp Val Leu Glu Asn Ser Met Arg Phe Thr Ala Tyr Gly Ile
                            40
His Thr Val Ile Val Glu Gly Glu Ala Lys His Ile Thr Ala Leu Asp
                        55
Asp Val Thr Leu Cys Asn Glu Trp Ala Lys Leu Lys Arg Glu Asn Asn
                    70
Arg Leu Tyr Ala Ala Asn Glu Lys Ile Cys Ser Gly Trp Arg Gly Phe
                                    90
Val Leu Arg Leu Leu Gly Ile Thr Leu Pro Cys Arg Lys Pro Val Ile
                                105
Leu Leu Gly Val Asp Gly Lys Asn Gln Asn Asp Ala Val Lys Gly Ala
                            120
Asp Leu
   130
<210> 10671
<211> 122
<212> PRT
<213> Enterobacter cloacae
<400> 10671
Phe Ser Gly Glu Pro Thr Val Leu Arg Lys Leu Phe Tyr Gly Tyr Val
                                    10
Arg Lys Ile Met Phe Ser Glu Arg Ser Val His Leu Ile Thr Ser Cys
                                25
Thr Lys Gly Lys Asn His Gln Gly His Val Trp Pro Thr Leu Asp Ile
                            40
Asp Pro Lys Gln Thr Pro Asp Asp Ala Ala Tyr Ala Trp Ser Asn Ile
                        55
Val Asp Asp Ala Arg Ser Asn Gln Ala Val Pro Ala Leu Ser Leu Tyr
                    70
                                        75
Ser Gly Asn His Trp Ser Thr Ala Lys Glu Ile Leu Asn Ser Thr Arg
                8.5
                                    90
Asn Leu Glu Leu Trp Ile Ile Ser Ala Gly Met Gly Phe Leu Asn Ser
           100
                                105
Arg Asp Arg Ala Leu Leu Met Arg Phe
       115
<210> 10672
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 10672
Val Cys His Ala Thr Asn Asn Gly Tyr Leu Thr Phe Ile Tyr Ser Pro
                                    1.0
Thr Met Leu Ile Val Arg His Ala Ile Arg Ser Phe Ser Leu Ser Arg
Ala Thr Phe Asn Leu Met Glu Glu Cys Met Tyr Gly Leu Ser Leu Ile
Arg Leu Gly Leu Phe Ile Ala Leu Ala Ile Ile Ala Ser Thr Ala Ile
Gly Leu Phe Thr Tyr Val Val Val Ser Ala Leu Ala Glu
<210> 10673
<211> 324
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## <213> Enterobacter cloacae

<400> 10673 Thr Thr Met Asn Ala Thr Gly Leu Asn Ile Ile Lys Thr Leu Gly Cys Met Thr Ala Val Thr Phe Phe Thr Ile Tyr Asn Thr Trp Asp His Tyr Asp Tyr Asp Tyr His Trp Ile Leu Gly Phe Leu Thr Phe Ile Ser Thr 40 Ile Ala Thr Pro Leu Phe Phe Val Val Ala Gly Tyr Leu Asp Gly Gln 55 60 Ser Arg His Gly Thr Arg Trp Gln Leu Asp Lys Ile Lys Arg Leu Val 75 70 Ile Val Phe Leu Phe Trp Val Thr Ile Tyr Tyr Leu Trp Glu Pro Tyr 90 Gln Arg Gly Tyr Leu Ile Gln Pro Trp Phe Val Phe Ala Phe Ile Val 100 105 Ile Tyr Thr Phe His Pro Val Val Glu Arg Leu Gly Gln Arg Arg Met 120 Leu Phe Cys Gly Val Ile Thr Ala Leu Leu Phe Ser Tyr Gly Tyr 135 Asp Leu Leu Ser Ala Leu Tyr Pro Asp Ala His Val Leu Ser Leu Ser 150 155 Pro Gln Tyr Arg Leu Trp Thr Trp Leu Leu Phe Tyr Leu Thr Gly Gln 165 170 175 Leu Phe Cys Asp Pro Gln Ile Ala Ala Trp Ile Gly Arg Lys Asn Val 180 185 190 Val Arg Ala Ala Val Ile Ala Ile Pro Phe Ile Tyr Leu Phe Thr Trp 200 Phe Tyr Glu Arg His Phe Phe Phe Ala Leu Phe Lys Ala Asp Arg Asn 215 220 Ala Phe Ile Leu Thr Gly Ser Gln Ile Tyr Ile Leu Ile Ile Ala Leu 230 235 Val Ile Ala Ala Asn Gly Val Arg Phe Arg Arg Asn Ala Glu Phe Lys 245 250 Glu Ser Val Leu Ala Ala Ile Ser Lys Thr Met Thr Gly Val Tyr Ile 265 Met His Tyr Ser Val Phe His Leu Leu Thr Ala Leu Ile Pro Val Thr 280 Ser Leu Ser Thr Lys Leu Ala Leu Ile Val Leu Thr Phe Val Thr Ser 295 Val Leu Phe Ser Leu Leu Ile Leu Ser Asn Thr Val Ala Lys Lys Val Ile Thr Leu

<210> 10674 <211> 75

<212> PRT

<213> Enterobacter cloacae

<400> 10674

70

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<210> 10675
<211> 118
<212> PRT
<213> Enterobacter cloacae
```

<400> 10675

 Ser
 Met
 Ala
 Ala
 Ala
 Thr
 Gly
 Trp
 Ile
 Ser
 Ala
 Ala
 Ser
 Cys
 Leu
 Thr

 1
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 15

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 Glu
 Asn
 Val
 Asn
 Val
 Gly
 Ile
 Glu
 Thr
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 Val
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105

100 Arg Pro Gly Gly Gly 115

<210> 10676 <211> 169 <212> PRT

<213> Enterobacter cloacae

<400> 10676

Trp Thr Arg Gly Arg Lys Met Gly Ile Ser Pro Thr Leu Asn Ile Pro Gln Ala Arq Phe Leu Ala Met Gln His Lys Phe Lys Ala Tyr Val Ala Gly Phe Gly Ser Gly Lys Thr Trp Val Gly Cys Gly Gly Ile Cys Lys 40 Gly Met Trp Glu His Pro Lys Ile Asn Gln Gly Tyr Phe Ala Pro Thr 55 Tyr Pro Gln Ile Arg Asp Ile Phe Tyr Pro Thr Ile Glu Glu Val Ala Phe Asp Trp Gly Leu Asn Val Lys Ile Asn Glu Gly Asn Lys Glu Val His Phe Tyr Glu Gly Arg Arg Tyr Arg Gly Thr Thr Ile Cys Arg Ser 100 105 110 Met Glu Lys Pro Gly Ser Ile Val Gly Phe Lys Ile Gly Asn Ala Met 115 120 125 Val Asp Glu Leu Asp Val Met Ala Ala Ala Lys Ala Gln Gln Ala Trp 135 140 Arg Lys Ile Ile Ala Arg Met Arg Tyr Lys Ile Asp Gly Leu Arg Asn 155 150

Gly Ile Pro Leu Thr Gly Pro Gly 165

<210> 10677 <211> 310

<212> PRT

<213> Enterobacter cloacae

<400> 10677

Thr Met Lys Glu Cys Lys Lys Asp Arg Leu Pro Glu Tyr Lys Ser Leu

```
10
Ser Val Leu Leu Phe Ile Ile Ser Ile Phe Ile Val Ile Phe Ile Pro
                                25
Val Ala Ser Leu Leu Ile Leu Val Ile Leu Val Val Thr Ile Lys Lys
                            40
Gln Lys Ala Arg Thr Lys Pro Gln Glu Asn Ile Tyr His Phe Val Lys
                        55
Asp Met Asn Ala Phe Gly Ser Ile Leu Glu Ser Arg Cys Leu Met Ser
                    70
                                        75
Leu Thr Gly Gly Arg Cys Tyr Ala Thr Ser Ile Phe Asn Pro Tyr Leu
                                    90
Gly Leu Ser Leu Phe Asp Thr Asp Asn Ile Lys Tyr Val Leu Val Met
                                105
Lys Gly Lys Ala Thr Asp Val Phe Lys Pro Ile Ile Ser Ser Tyr Arg
                            120
                                                 125
Glu Val Phe Leu Pro Trp Lys Trp Trp Lys Phe Phe Arg Gly Glu Tyr
                        135
Val Ser Lys Ala Leu Lys Asp Leu Glu Phe Asn Cys Asp Val Lys Ser
                    150
                                        155
Val Arg Asn Glu Tyr Lys Glu Tyr Asn Arg Phe Val Cys Gly Ser Arg
                                    170
                165
Lys Arg Val Leu Phe Cys Tyr Leu Tyr Ile Asp Asn Leu Thr Glu Leu
            180
                                185
Glu Asn Asp Leu Ser Ile Tyr Arg Ile Gln Lys Phe Leu Phe Trp Ile
        195
                            200
Gly Asp Ile Phe Leu Ser Val Leu Gly Trp Ile Gly Ile Val Cys Gly
                        215
                                             220
Asn Leu Ile Phe Leu Gly Leu Cys Gly Cys Glu Phe Val Asn Ser Leu
                    230
                                        235
Met Asn Tyr Ile Ser Lys Asn Asn Asp Ser Phe Ala Thr His Phe Ser
                245
                                    250
Ile Tyr Trp Val Ile Tyr Ile Ser Gly Val Phe Phe Ala Val Phe Leu
                                265
Ile Ala Cys Leu Tyr Phe Ile Leu Arg Lys Lys Ser Ile Thr Ser Arg
                            280
Val Ala Arg Gln Lys Lys Lys Tyr Lys Ser Asn Tyr Lys Phe Met Leu
                        295
Ser Ile Ser Glu Lys
<210> 10678
<211> 132
<212> PRT
<213> Enterobacter cloacae
<400> 10678
Gly Gly Ala Met Ser Asp Pro Phe Ser Gly Thr Gly Leu Ala Gly Leu
                                    10
Ala Leu Thr Gly Ala Ser Val Tyr Gly Leu Leu Thr Gly Thr Asp Tyr
                                25
Gly Val Val Phe Gly Ala Phe Ala Gly Ala Val Phe Tyr Ile Ala Thr
                            40
                                                 45
Ala Thr Asp Leu Ser Met Leu Arg Arg Leu Ala Tyr Phe Val Val Ser
                        55
Tyr Ile Val Gly Ile Leu Gly Tyr Gly Leu Val Gly Ser Lys Leu Ala
                    70
                                        75
Ser Trp Thr Glu Tyr Ser Asp Lys Pro Leu Asp Ala Ile Gly Ala Val
                                    90
Ile Val Ser Ala Leu Ala Val Gln Ile Leu Thr Phe Leu Asn Lys Gln
                                105
```

Asp Ile Gly Ser Leu Val Ala Leu Ile Thr Arg Arg Gly Gly Ser Gly

```
115
                            120
                                                 125
Gly Thr Lys
   130
<210> 10679
<211> 78
<212> PRT
<213> Enterobacter cloacae
<400> 10679
Lys Gln Arg Lys Arg Pro Ala Met Tyr Ser Arg Leu Leu Ile Ile Cys
Leu Ala Thr Met Leu Ile Ala Ser Cys Val Thr Asn Gly Ser Val Pro
                                25
Ala Val Val Asp Thr Gly Cys Asp Trp Val Lys Pro Ile Phe Leu Thr
Asp Gln Asp Ile Asp Val Leu Asp Arg Gln Thr Lys Lys Asp Ile Leu
                        55
Ala His Asn Lys Ala Trp Lys Ala Asn Cys Gly Lys Asn
<210> 10680
<211> 152
<212> PRT
<213> Enterobacter cloacae
<400> 10680
Gln Pro Met Lys Ile His Phe Ile Thr Ile Ala Leu Leu Ala Thr Ile
                                    10
Ser Ser Pro Ser Tyr Ala Ala Phe Gln Glu Arg Glu Tyr Asn Thr Trp
Tyr Gln Lys Asp Ala Val Leu Tyr Asp Ile Thr Gln Thr Ser Glu Gly
        35
                            40
Leu Pro Val Met Ile Ser Ile Ser Gln Pro Gly Arg Glu Ser Ala Asn
                        55
Met Leu Val Ser Tyr Met Ser Asp Gly Gly Cys Gly Asp Glu Lys Val
                    70
                                        75
Arg Leu Asn Ala Asn Gly Lys Asp Val Pro Ala Thr Tyr Thr Cys Val
Ser Val Gly Ala Asp Arg Ile Glu His Phe Ala Val Asn Asp Ala Ser
Lys Val Asn Glu Met Val Asn His Leu Lys Ser Asp Phe Thr Leu Leu
                            120
Leu Gln Asn Asp Ile Lys Val Trp Ala Ala Asn Ile Lys Thr Pro Lys
                        135
Tyr Gly Leu Ala Pro Lys Phe
<210> 10681
<211> 469
<212> PRT
<213> Enterobacter cloacae
<400> 10681
Leu Asp Leu Gly Glu Arg Gln His Ile His Gln His His Leu Pro Ile
                                    10
Thr His Ser Val Ser Lys Gln Thr Pro Leu Arg Arg Gly Phe Leu Leu
                                25
Pro Gly Glu Asn Met Leu Tyr Asn Thr Gly Thr Ile Ala Ile Asn Gly
                            40
Asn Thr Ala Thr Gly Thr Gly Thr Asn Trp Thr Ala Pro Ala Ser Gln
```

<400> 10682

```
55
                                             60
Ile Arg Val Gly Gln Thr Leu Phe Val Leu Ser Asn Pro Val Gln Met
                    70
                                        75
Phe Gln Ile Thr Ala Ile Asn Ser Ala Thr Ser Leu Thr Val Thr Pro
                85
                                    90
Ala Ala Ser Gln Ala Leu Ser Gly Gln Lys Tyr Gly Ile Leu Val Thr
                                105
Asp Ser Leu Ser Val Asp Gly Leu Ala Gln Ser Met Ser Gln Leu Ile
                            120
Asn Glu Tyr Asp Glu Asn Ile Gly Ala Trp Glu Thr Phe Ala Thr Thr
                        135
                                             140
Ser Ala Asn Gln Asn Ile Thr Val Thr Ile Asn Gly Ala Arg Val Thr
                    150
                                         155
Ile Pro Ala Ile Gly Lys Leu Val Gln Lys Gly Ser Asn Gly Ala Val
                165
                                    170
Gly Val Ser Asp Gly Gly Thr Gly Ala Thr Asn Ala Ala Asp Ala Arg
            180
                                185
Thr Asn Leu Gly Leu Gly Thr Ser Ala Thr Arg Asn Val Gly Gly Ala
                            200
Pro Gly Asn Val Met Glu Val Gly Ala Phe Gly Val Gly Leu Thr Asn
    210
                        215
                                            220
Phe Thr Ala Asn Ser Val Ala Asp Ala Asn Asp Ile Thr Phe Asn Gly
                    230
                                         235
Phe Ser Gly Gly Gly Ala Ser Ser Val Asn Phe Phe Asp Gln Tyr
                245
                                    250
Ala Gly Leu Leu Ala Ile Thr Arg Ser Gly Gly Gly Asp Gly Asn Gly
                                                     270
            260
                                265
Phe Ile Ala Gln Leu Gln Ile Ser Gly Ser Gly Ala Met Ala Val Arg
                            280
Gly Arg Ala Gly Thr Thr Trp Ser Ser Trp Met Gln Val Tyr Asn Thr
                        295
                                             300
Gly Asn Thr Thr Lys Ala Ser Asp Gly Thr Leu Lys Ala Ala Ser Pro
                    310
                                         315
Val Ala Arg Ile Val Ala Ser Ala Asp Thr Cys Leu Arg Ser Asp Ile
                325
                                    330
Ala Glu Asp Gly Phe Ser Trp Cys Gly Cys Gly Thr Ala Asn Thr Glu
                                345
Ala Glu Gly Ile Lys Ile Leu Arg Leu Asp Val Gly Val Tyr Val Leu
                            360
Thr Gly Ser Ser Gly Leu Ala Ser Glu Gly Trp Gln Leu Leu Pro Pro
                        375
Met Asp Pro Gly Gly Met Gly Glu Leu Gly Val Val Glu Ala Glu Gln
                    390
                                         395
Thr Ala Asp Gly Glu Leu Thr Ile Arg Leu Phe Lys Arg Lys Tyr Met
                                    410
Leu Ser Asp Glu Gly Glu Ile Val Lys Thr Lys Gly Glu Pro Met Asp
            420
                                425
Val Pro Val Asn Ser Trp Ile Asp Val Arg Leu Asp Met Pro Asp Asp
                            440
                                                 445
Ser Val Phe Asn Gln Arg Met Arg Gln Glu Pro Gln Leu Glu Pro His
   450
                        455
Ser Pro Ala Leu
465
<210> 10682
<211> 64
<212> PRT
<213> Enterobacter cloacae
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Pro Val Arg Val Trp Arg Ser Arg Cys Phe Thr Gly Ala Cys Pro Leu

```
10
Ile Tyr Pro His Asn Gly Leu Leu Tyr Leu Leu Ala Ile Thr Arg Leu
                                25
Gly Ala Ala Ser Leu Leu His Gly Leu Met Ala Ala Val Asn Pro
                            40
                                                45
Leu Thr Val Ser Arg Ser Leu Ala His Pro Pro Val Lys Thr Ile
<210> 10683
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 10683
Tyr Pro Thr Leu Thr Leu Val Val Ile Cys Leu Ala Ala Arg Leu Tyr
                                    10
Met Thr Leu Met Arg Arg Met Pro Thr Pro Gly Asn Ile Asn Lys Lys
                                25
Ser Asn Glu Thr Glu Thr Pro Val Ala Leu Ala Glu Arg Ala Phe Phe
                            40
Ser Lys Lys Ser Gln Leu Gly Gln Asn Trp Leu Gly Leu Ala Val Ser
 50
                        55
Arg Tyr Tyr Phe Ala Leu Ile Ser Thr Cys Thr Leu Phe Leu
                    70
<210> 10684
<211> 92
<212> PRT
<213> Enterobacter cloacae
<400> 10684
Gly Met Leu Ser Val Gly Leu Ile Pro Ile Phe Arg Pro Arg Val His
Tyr Ile Asp Ile Asp Leu Asn Trp Gly Arg Phe Val Ile Ile Thr Ile
                                25
Thr Gly Gln Leu Phe Ala Glu Phe Phe His Leu Gln Gln Pro Ala Val
Asp Phe Asp Leu Leu Glu Thr Leu Ser Glu Leu Ala Ile Arg Gln Ala
Glu Pro Leu His Tyr Arg Phe Lys His Ser Leu Thr Ala Asp Gly Cys
                    70
Asp Phe Asp Thr Ile Leu Ala Asn Leu His Ala
<210> 10685
<211> 76
<212> PRT
<213> Enterobacter cloacae
<400> 10685
Val Lys Ala Asn Ser Met Val Thr Lys Lys Ile Cys Asn His Leu Ser
                                    10
Ile His Tyr Gln His Ser Thr Ala Ser Thr Leu Phe Leu Val Ser Phe
            20
                                25
Phe Glu Trp Arg Thr Gly Cys Tyr Val Ser Ser Met Met Ser Asn Asn
                            40
Lys Glu Ser Leu Ile Lys Gln Ile Ser Glu Tyr Ala Arg Leu Asn Glu
                        55
Gln Glu Glu Ile Gln Leu Arg Lys Ile Ile Ser
                    70
```

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<210> 10686
<211> 90
<212> PRT
<213> Enterobacter cloacae
<400> 10686
Met Pro Asn Ala Ser Asp Tyr Phe Ser Cys Asn His Ile Phe Ser Phe
Thr Val Arg Lys Val Gly Asp Leu Asp Thr Val Ile Val Ser Asn Pro
            20
                                25
Ile Ile Ser Leu Phe His Asn Ser Pro Leu Lys Leu Phe His Leu Glu
                            40
Val Tyr Met Thr Ile Gln Asn Leu Val Val Asp Lys Thr Phe Phe Leu
                        55
   50
                                             60
Arg Met Trp Arg Arg Val Pro Pro Gly Asp Leu Ser Leu Val Val Lys
                    70
                                         75
Val Ala Cys Ile Pro Ala His Ser Ser
                85
<210> 10687
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10687
Lys Lys Ile Phe Phe Glu His Arg Phe Gln Asn Gly Phe Pro Phe Met
Pro Gly Ala Ala Gly Ala Val Ala Leu Asn Ile Arg His Val Ser Lys
Leu Ile Tyr Thr His Leu Ile Val Asn Thr Asn Lys Lys Thr Asn His
                            40
Val Tyr Tyr Phe Ile Asn Asp Ala Ile Leu Lys Ser Val
                        55
<210> 10688
<211> 90
<212> PRT
<213> Enterobacter cloacae
<400> 10688
Thr Glu Met Thr His Thr Ala Val Ser Gln Ala Asn Ser Ala Leu Gln
                                    10
Leu Pro Thr Val Glu His Val Tyr Ala Leu Leu Lys Ala Asn Cys Lys
            20
                                25
Pro Asp Arg Phe Asp Gly Arg Asp Gly Pro Val Trp Gly Gln Glu Tyr
                            40
                                                 4.5
Ser Trp Asn Leu Ala Lys Asp Arg Leu Gln Asp Leu Glu Lys Tyr Gly
                        55
Lys Ala Tyr Val Ser Arg His Glu Asp Arg Met Gly Glu Gly Phe Ser
                    70
                                         75
Phe Gly Pro Asp Leu Leu Ile Ile Arg
                85
<210> 10689
<211> 811
<212> PRT
<213> Enterobacter cloacae
<400> 10689
Arg Gly Ile Arg Met Lys His Leu Ala Phe Ile Thr Ala Val Ala Gly
```

Leu Gly Met Ser Val Gln Ala Pro Ala Gln Ile Tyr Glu Ser Ala Phe 20 25 Lys Asp Thr Asn Gly Ile Glu Ile His Ala Pro Ser Ser Arg Leu Met 40 Leu Asn Pro Ala Ser Pro Val Thr Leu Thr Leu Ile Ser Gly Leu Asp 55 Arg Phe Val Asn Val Lys Val Thr Lys Asp Thr Gly Thr Val Ile Leu 70 75 Asn Thr Thr Thr Arg Thr Gly Val Ser Asp Arg Leu Thr Ala Ala 85 Asp Gly Ser Glu Phe Tyr Gly Lys Lys Val Thr Leu Pro Ala Leu Gly 105 Glu Gly Lys Phe Val Val Gln Ile Asn Val Leu Asp Leu Asn Gln Lys 120 Pro Val Ala Thr Tyr Asn Tyr Asn Trp Leu Ile Asp Val Thr Pro Pro 135 140 Ala Ala Asn Ala Leu Thr Ala Asn Thr Gly Ser Gly Ser Thr Ala Gly 150 155 Asp Val Trp Lys Leu Gly Leu Glu Ala Thr Gly Gln Tyr Asp Phe Thr 165 170 Ser Ser Gly Val Ser Asp Ala Asn Gly Ile Asp Lys Gly Leu Ile Tyr 180 185 Ile Tyr Arg Gln Asp Gly Ser Leu Tyr Ser Thr Thr Gln Met Gln Tyr 200 Asp Val Ser Gly Gln Lys Met Tyr His Thr Tyr Ser Lys Asn Ser Val 215 220 Lys Gly Thr Gly Ile Pro Asp Ser Asn Leu Asp Glu Asp Phe Thr Ala 230 235 Lys Val Val Ile Phe Asp Asn Ala Gly Asn Ser Arg Thr Leu Pro Thr 245 250 Gln Lys Phe Arg Tyr Asp Asn Thr Leu Gly Glu Met Thr Leu Trp Ala 260 265 Val His Asp Pro Asn Thr Ser Ser Ser Val Val Pro Gly Val Ser Asn 280 Tyr Pro Ala Tyr Lys Ala Gly Met Val Val Asn Glu Asn Pro Ile Arg 295 Leu Val Tyr Arg Ile Pro Lys Ser Asn Tyr Arg Ala Tyr Ser Glu Gly 315 310 Gly Leu Gln Phe Ile Asn Gln Tyr Ser Ala Pro Lys Glu Ile Ala Val 330 Asp Ser Thr Tyr Ala Tyr Val Glu Met Thr Leu Pro Tyr Gly Ser Ile 345 Asn Gly Asp Met Ala Arg Met Ala Asn Phe Gly Gln Trp Gly Gly Tyr 360 Tyr Pro Ser Tyr Ser Leu Val Leu Asn Pro Ser Ala Asn Gln Thr Pro 375 380 Ala Phe Ala Gly Thr Trp Val Asp Phe Leu Asp Asp Lys Gly Asn Trp 395 390 Val Lys Trp Lys Asp Phe Glu Ser Val Ala Ser Ser Arg Leu Pro Ile 405 410 Lys Ile Ser Arg Leu Arg Phe Asn Val Glu Ala Arg Pro Phe Ala Gln 425 Glu Ile Gly Gly Lys Ala Thr Cys Thr Ile Pro Ala Gly Lys Thr Ser 440 Cys Glu Ala Pro Glu Thr Phe Asp Met Ala Leu Gly Thr Gln Gly Tyr 455 460 Asn Arg Ile Leu Tyr Phe Val Arg Ser Ile Ser Asn Pro Ile Leu Arg 470 475 Ser Glu Gln Trp Ile Met Thr Arg Trp Asn Asn Lys Gln Leu Pro Val 485 490 Ile Asn Ser Ile Ser Tyr Asp Glu Thr Asn Lys Gln Leu Asp Val Leu

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505
            500
                                                     510
Ala Ser Leu Glu Gly Asp Gly Asn Trp Phe Asp Ser Val Ser Leu Arg
                            520
                                                525
Glu Phe Tyr Leu Ser Asp Lys Asn Thr Gly Thr Arg Met Ser Pro Thr
                        535
                                            540
Gly Val Ile Lys Ser Arg Ile Ser Gly Asn Tyr Thr Ile Ala Tyr Asp
                    550
                                        555
Leu Ser Arg Gln Ser Glu Gly Lys Tyr Asn Val Glu Val Asn Ile Arg
                                    570
Asp Phe Phe Gln Asn Gln Thr Asn Lys Thr Phe Gly Glu Ile Ala Leu
                                585
Asp Asn Thr Pro Pro Thr Val Ala Ile Thr Phe Asp Gly Lys Pro Val
                            600
                                                 605
Lys Asp Asp Thr Val Val Tyr Gly Leu Glu Asn Leu Arg Ile Ala Leu
                        615
                                            620
Ala Asp Asn Leu Thr Thr Pro Arg Ile Thr Arg Leu Gln Leu Val Gly
                    630
                                        635
Gly Pro Thr Ala Asp Asn Val Glu Leu Thr Trp Ser Pro Ala Gly Lys
                645
                                    650
Asp Thr Tyr Met Pro Glu Tyr Pro Arg Leu Phe Pro Asn Phe Glu Pro
            660
                                665
                                                     670
Ser Glu Asn Tyr Ser Ile Ser Val Thr Val Ala Asp Ser Gln Ser Asn
                            680
                                                 685
Thr Lys Thr Tyr Thr Gln Lys Phe Ser Tyr Leu Pro Asn Asn Leu Val
    690
                        695
                                            700
Gln Leu His Asn Leu Arg Thr Leu Ser Val Ser Ser Pro Leu Lys Thr
                    710
                                        715
Thr Asp Gly Val Pro Leu Ala Tyr Leu Ser Thr Asn Val Leu Arg Lys
                725
                                    730
Thr Asn Gly Glu Ile Ala Lys Gly Val Gln Asn Ala Thr Leu Thr Val
            740
                                745
Arg Lys Asp Ala Ala Phe Gly Ile Lys Phe Asn Gly Ala Gln Ala Ala
                            760
Pro Gly Glu Ser Val Glu Val Gln Ile Asp Met Gly Gln Gly Asp Asn
                        775
                                            780
Leu Leu Pro Val Tyr Pro Ser Glu Asn Gly Lys Val Gly Thr Ser
                    790
                                        795
Glu Phe Met Ile Gln Ile Asp Glu Leu Lys
                805
```

<210> 10690

<211> 265

<212> PRT

<213> Enterobacter cloacae

<220>

<221>UNSURE

<222>(212)

<400> 10690

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85
                                    90
Leu Leu Val Glu Pro Asp Ala Ser Leu Pro Ser Leu Ala Lys Asn Val
            100
                                105
Trp Met Tyr Ala Asp Pro Glu Gly Trp Lys Glu His Phe Gly Ala Glu
                            120
Glu Asp Cys Leu Thr Pro Glu Met Met Gln Leu Phe Arg Lys Gly Ile
                        135
                                            140
Gln Ala Leu Gln Lys Glu His Asp Thr Pro Glu Ile Ser Leu Thr Leu
                    150
                                        155
Gln Asp Trp Arg Leu Glu Glu Glu Thr Leu Pro Glu Glu Asp Ser Gln
                165
                                    170
Ala Tyr Gln Val Ser Val Thr Gly Gln His Asn Ile His Cys Glu Val
                                185
                                                     190
            180
Val Asn Lys Glu Gly Asn Pro Cys Leu Gly Val Met Phe Glu Ile Asp
                            200
        195
                                                205
Gln Gly Val Xaa Ala Leu His Ile Asn Thr Gly Gly Asp Met Leu Leu
                        215
                                            220
His Ile His Cys Ala His Asn Gly Leu Val Leu Thr Pro Asp Ala Ser
                    230
                                        235
Gly Gln Arg Phe Asp Lys Ala Pro Val Asp Arg Phe Ser Tyr Asn Ser
                245
                                    250
Pro Ser Leu Leu Leu Ser Ala Asp
<210> 10691
<211> 204
<212> PRT
<213> Enterobacter cloacae
<400> 10691
Tyr Gly Lys His Asn Trp Lys Asn Met Phe Ser Lys Pro Met Thr Thr
Phe Thr Pro Glu Arg Ile Glu Gln Ile Leu Glu Phe Ala Glu Gly Ser
Asn Pro Ser Glu Ala Met Ser Leu Arg Ala Asp Glu Val Ala Val Leu
                            40
Ala Arg Ile Gly Lys Ala Val Met Ser Ile Ala Pro Val Tyr Gln Cys
                        55
Glu Phe Cys His His Asp Ala Thr Gly Gln Leu Gln Trp His Trp Glu
                    70
                                        75
Asp Val Asn Lys Ala Phe Tyr Asp Lys Tyr Asp Pro Asp Arg Arg Gly
                                    90
Arg Arg Ile Leu Tyr Thr Ala Pro Pro Met Pro Leu Val Ser Ala
            100
                                105
                                                     110
Asp Leu Leu Asn Met Ala Ser Ser Ala Ile Glu Asp Leu Leu Thr Asn
                            120
                                                125
       115
Lys Asp Arg Ser Gly Ala Gly Met Trp Asn Asp Ile Pro Glu Gln Leu
                        135
                                            140
Arg Arg Ala Ala Glu Leu Val Met Asp Asn Ser Arg Ala Ala Glu Thr
                    150
                                        155
Glu Ala Met Leu Met Arg Leu Tyr Val Glu Cys Asp Thr Gly Glu Arg
                                    170
               165
Arg Gly Asn Gly Thr Gln Ser Gly Val Ala Met Pro Ser Trp Gln Thr
                               185
Val Glu Glu Ala Arg Val Leu Leu Gly Val Lys
<210> 10692
<211> 66
```

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
<400> 10692
Ala Phe Pro Lys Gly His Tyr Val Arg Lys Ser Ile Lys Asn Phe Ser
Ile Trp Cys Ser Lys Leu Gln Ile Tyr Asn Leu Pro Phe Asp Lys Pro
                                25
Tyr Cys Ala Phe Arg Thr Glu Ile Phe Leu Phe Gly Ile Thr Ser Asp
                            40
Ile Ser Val Val Ser Lys Leu Ala Thr Ile Ala Lys Leu Ile Thr Leu
                        55
Ala
65
<210> 10693
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 10693
Ala Thr Ser Leu Ser Glu His Cys Asp Gly Met His Asp Met Phe Asn
                                    10
Val Arg Ala Phe Lys Glu Trp Trp Ile His Asn Asp Asn Ile Lys Ser
Phe Ile Gly Leu Val Pro Lys Lys Val Gly Met His Gln Leu Asp Ser
                            40
Cys Ala Lys Asp Thr Ile Val Leu His Cys Lys Glu Ser Leu Ile Val
Gln Phe Asp Pro Gly Asn Gln Cys Ile Arg Ser Arg Gln Phe
<210> 10694
<211> 189
<212> PRT
<213> Enterobacter cloacae
<400> 10694
Arg His Arg Pro Gly Gly Thr Gly His Lys Arg Lys Thr Ile Leu Lys
                                    10
Pro Met Leu Lys Lys Asp Phe Phe Ser Ala Ile Glu Asn Leu Leu Lys
           20
                                25
Ala Gly Phe Gln Pro Arg Phe Tyr Thr Val Asn Ser Gly Arg Ile Gly
                            40
                                                4.5
Leu Ile Thr Phe Thr Asp Lys Asn Gly Thr Lys Gln Val Glu Gln Val
                        55
Tyr Ser Cys Thr Ser Leu Ala Ala Asn Thr Phe Gly Lys Arg Phe Thr
                    70
                                        75
Thr Trp Leu Glu Glu Ile Phe Gln Lys His Asn Glu Glu Lys Val Ala
                                    90
Asp Ser Gly Phe Glu Val Gly Ser Arg Val Trp Asp Lys Leu Met Tyr
                                105
Thr Leu Arg Thr Ile Ser Glu Ile Arg Ala Gly Gly Val Leu Val Leu
                            120
Asp Asn Gly Ala Gln Arg Thr Leu Asp Glu Val Gln Lys Thr Ala Pro
                        135
Glu Thr Asn Gln Val Glu Pro Lys Glu Ile Ser Ser Leu Gln Glu Leu
                   150
                                        155
Leu Asn Ala Ser Lys Asn Leu Glu Pro Thr Ser Pro Glu Leu Ile Ala
               165
                                    170
Ala Leu Asn Glu Ala Leu Ser Thr Ala Ile Lys Arg
            180
                                185
```

```
<210> 10695
<211> 72
<212> PRT
<213> Enterobacter cloacae
<400> 10695
Pro Cys Thr Lys Met Met Glu Lys Gln Val Ala Lys Asn Asn Ser
                                    10
Leu Lys Gln His Val Phe Asn Met Leu Ser Ala Gly Ser Glu Leu Lys
                                25
Glu Val Lys Arg Phe Leu Thr Ser Lys Arg Val Lys Ala Arg Leu Ala
                            40
Val Ser Met Ile His Glu Gln Ala Ile Ala Val Gln Asn Thr Glu Tyr
                        55
Gln Asn Tyr Pro Ala Tyr Ser
<210> 10696
<211> 242
<212> PRT
<213> Enterobacter cloacae
<400> 10696
Cys Val Pro Tyr Trp His Cys His Cys Pro Pro Ser Val Arg Ser Ala
1
                                    10
Leu Gly Gly His Arg Asn Leu Met Arg Arg Val Thr Ala Ile Val Asn
            20
Leu Asp Trp Ile Gly Glu Tyr Gly Phe Arg Leu Gly Gln Met Ser Met
                            40
Val Met Leu His Pro Ala His Tyr Cys Ser His Cys Arg Ser Ala Glu
                                             60
Leu Met Leu Ser Phe Tyr Val Ala Thr Thr Val Val Ser Pro Glu
                    70
                                         75
Ser Asp Tyr Arg Cys His Gly Arg Pro Val Glu Arg Val Asn Leu Leu
                85
                                    90
Asn His Arq Val Thr Thr Val Leu Ser Pro Glu Ser His Tyr Arg Cys
His Gly Arg Leu Val Lys Arg Ile Tyr Leu Ser Ile His Arg Val Thr
                            120
        115
Met Val Val Ser Pro Ala Ser His Tyr Arg Cys His Ser Arg Pro Val
                        135
                                             140
Glu Gln Ile Asn Leu Leu Thr Tyr Arg Met Thr Thr Val Val Ser Leu
                    150
                                        155
Leu Ser His Tyr Arg Cys His Cys His Pro Glu Glu Arg Met Ile Leu
                165
                                    170
Ser Ile His Thr Ala Thr Met Ala Leu Ser Pro Ala Ser His Phe Arg
            180
                                185
                                                     190
Cys His Ser Leu Pro Glu Glu Gln Met Ser Leu Leu Ile Asn Arg Val
        195
                            200
Thr Thr Val Val Ser Ser Leu Ser His Tyr Tyr Cys His Gly Arg Thr
                        215
                                            220
Ala Glu Leu Ile Ile Leu Ser Ile His Thr Pro Thr Met Val Val Ser
225
                    230
                                        235
Tyr
<210> 10697
<211> 144
<212> PRT
<213> Enterobacter cloacae
```

<400> 10699

```
<400> 10697
Met Ala Met Asn Lys Lys Glu Gln Ala Ala Tyr Asp Glu Leu Val Ala
                                    10
Gln Ala Arg Ile Asn Arg Ala Leu Arg Trp Ser Asp Tyr Gly Val Glu
                                25
Arg Asp Met Pro Val Pro Glu Val Ser Gly Glu Tyr Gln Asn Gly Trp
                            40
Ser Phe Asn Thr Ala Thr Gly Thr Val Tyr Pro Thr Trp Ser Gly Thr
                        55
Thr Val His Gly Thr Arg Glu Glu Gly Glu Val Val Asp Ala Thr Ser
                                        75
                    70
Arg Arg Met Arg Gly Met Asn Gly Ser Gln Asn Gly Ile Pro Gln Tyr
                85
                                    90
Ser Thr Lys Glu Arg Ala Leu Lys Ala Leu Arg Cys Ser Leu Glu Ile
            100
                                105
Lys Phe Ala Met Gln Leu Asp Ala Ile Asp Lys Ala Ile Ala Lys Glu
                            120
Ile Glu Leu Ser Thr Ala Arg Arg Glu Ser Asp Thr Ser Asp Ala
    130
                        135
<210> 10698
<211> 211
<212> PRT
<213> Enterobacter cloacae
<400> 10698
Leu Leu Asp Leu Pro Pro Ser Gly Glu Asp Val Thr Val Asp Gly
                                    10
Leu Glu Asn Val Arg Ile Gln Leu Thr Asp Ala Leu Thr Lys Pro Ser
            20
Leu Ser Arg Met Thr Leu Arg Gly Gly Pro Val Ser Asp Ala Val Glu
                            40
Leu Ser Trp Val Asn Leu Gly Asn Asn Leu Tyr Ala Pro Asn Tyr Pro
                        55
Lys Ile Phe Pro Ser Leu Asn Glu Gly Glu Thr Tyr Thr Leu Thr Val
                    70
Gln Ala Lys Asp Glu Met Asn Asn Val Lys Glu Ser Ser Val Glu Phe
                85
                                    90
Asn Tyr Leu Pro Asn Asn Leu Val Arg Leu Glu Asn Leu Lys Thr Leu
            100
                                105
Ala Val Asn Ala Ser Leu Lys Thr Ser Asp Asn Thr Pro Leu Ala Val
                            120
Leu Tyr Ala Ser Gln Leu Arg Lys Lys Asp Gly Ser Ile Ala Thr Gly
                        135
                                             140
Leu Gln Asp Ala Val Leu Thr Val Arg Lys Asp Ala Ala Phe Gly Val
                    150
                                        155
Thr Val Asn Gly Val Ser Ala Met Pro Gly Glu Ser Lys Glu Leu Gln
                                    170
Leu Asp Leu Gly Leu Gly Asp Ser Arg Ser Phe Pro Ile Phe Pro Ala
            180
                                185
                                                     190
Val Ser Gly Leu Thr Gly Arg Ser Glu Phe Met Ile Asn Ile Glu Glu
                            200
                                                205
Leu Lys
   210
<210> 10699
<211> 98
<212> PRT
<213> Enterobacter cloacae
```

 Ser Cys
 Pro Pro Pro Pro Ser I Leu Ala Gly Arg Ala IIe His Gln Met Pro Ser Gly 10
 Ser Gly 15

 Lys Pro Ser IIe Gln Ala Arg Asp Gln Arg Gly Leu Asn Ala Leu Lys 20
 25
 30

 Glu Ala Val Pro Ala Thr Ala Gln Leu Gln Met Arg Val Thr Pro Glu 35
 40
 45

 Arg Lys Leu Arg Tyr Val Asn Gln Ala Lys Ala Glu Gly Leu Gly Leu 50
 55
 60

 Thr Asp Trp Val Gln Lys His Met Asp Asn Val Cys Asp Leu Ala Gly 65
 70
 75

 Gln Pro Glu IIe Thr Met Tyr Lys Asp Asp Gly Glu Thr Ser Gly Gln 95
 90
 55

 Lys Lys
 15
 15

<210> 10700 <211> 76 <212> PRT <213> Enterobacter cloacae

<210> 10701 <211> 109 <212> PRT <213> Enterobacter cloacae

<210> 10702 <211> 93 <212> PRT <213> Enterobacter cloacae



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      Leu Ser Ser Ser Ser Arg Met Met Phe Met Leu Leu Ser Cys Gln Ala Ala 20

      Gly Lys Arg Val Lys Glu Pro Ser Trp Arg Val Tyr Phe Ile Ser Glu 35

      Leu Gly Met Ile Tyr Ser Lys Asn Lys Ile Lys Ser Ala Lys Ile Tyr 50

      Thr Ala Asn Ile Asn Tyr Cys Leu Ala Thr Gln Arg Asn Met Ile Ile 65

      Arg Thr Leu Ala Leu Ser Phe Phe Pro Gln Lys Leu 90
```

<210> 10703

<211> 65

<212> PRT

<213> Enterobacter cloacae

<400> 10703

65

<210> 10704

<211> 183

<212> PRT

<213> Enterobacter cloacae

<400> 10704

Arg Ile Thr Val Gln Leu Pro Val Glu Gly Leu Leu Phe Trp Lys Leu 25 Ser Gly Arg Glu Ala Met Ser Glu Ser Phe Ala Leu Thr Leu Thr Val 40 Leu Gly Thr Asp Ala Arg Ile Asp Arg Ser Arg Leu Leu Gly Gln Pro 55 Val Thr Val Thr Ile Pro Thr Gln Asn Leu Leu Thr Ser Arg Tyr Val 70 7.5 Asn Gly Lys Ile Thr Arg Val Ala Val Ser Ala Val Glu Leu Thr Gly 90 8.5 Thr Arg Tyr Ala Val Tyr Gln Leu Thr Val Glu Pro Asp Leu Trp Pro 100 105 110 Met Lys Arg Asp Arg Asn Leu Arg Ile Phe Gln Arg Pro Asn Gly Thr . 120 125 Gln Ile Val Lys Thr Leu Leu Gly Glu His Gln Val Lys Pro Pro Lys 135 140

Leu Leu Ala Leu Arg Phe Val His Ser Gly Ile Lys Ile Met Leu Asn

Thr Thr His Arg Gln Leu Pro Gly Val Gly Leu Leu Arg Ala Val Ser

145

150

155

160

Gly Val Glu Pro Gly Leu His Gln Pro Pro Asp Gly Ala Gly Gly Asp

Cys Val Leu Leu Pro Pro 180

<210> 10705

<211> 153

```
<212> PRT
<213> Enterobacter cloacae
<400> 10705
Ile Ile Pro Ser Ser Leu Met Lys Tyr Thr Leu Gln Glu Gly Ser Phe
                                    10
Thr Leu Phe Pro Ala Ala Trp Gln Asp Asn Ser Met Asn Ile Ile Arg
                                25
Asp Asp Glu Ser Gly Leu Ser Val Val Ser Arg Gly Val Ile Pro
                            40
Asp Asp Ser Asp Tyr Glu Gln Glu Phe His Arg Gln Trp Asp Val Leu
                        55
Arg Pro Gln Met Gly Glu Ile Ala Gln Ser Glu Phe Gln His Val Lys
                    70
                                        75
Ala Gly Pro Asp Gly Asn Ile Ser Gly Leu Glu Val Glu Thr Thr Phe
                85
                                    90
Asp Arg Asn Gly Gln Arg Leu Trp Gln Lys Gln Leu Ala Val Gln Thr
                                105
            100
                                                    110
Pro Gly Lys Pro Val Leu Met Ile Phe Thr Leu Ser Ala Leu Lys Ala
                            120
                                                125
Phe Thr Glu Glu Asp Glu Ala Arg Trp Ser Ala Leu Lys Gln Ser Leu
                        135
Thr Leu Asn Asp Asn Arg Asn Val
                    150
<210> 10706
<211> 176
<212> PRT
<213> Enterobacter cloacae
<400> 10706
Pro Ile His Leu Phe Met Leu Thr Glu Phe Tyr Leu Met Gly Gly Tyr
                                    10
Lys Met Ile Asp Phe Asn Ala Asp Ile Leu Ser Gly Arg Ala Leu Gly
Asn Val Phe Leu Gly Asp Asn Ile Ser Lys Tyr Ile Ser Glu Leu Tyr
Ala Gly Tyr Lys Val Thr Tyr Phe Asp Tyr Phe Leu Pro Asp Asp Lys
                        55
Lys Arg Leu Ala Tyr Ile Val Asp Asp Thr Met Thr Ile Ala Thr Leu
                                        75
Glu Asp Gly Thr Ile Ile Ser Ile Gly Cys Asn Val Asn Tyr Lys Gly
                                    90
                85
Arg Tyr Asn Lys Ile Leu Gln Thr Gly Gln Thr Met Gly Glu Ile Ile
                                105
                                                    110
Gly Leu Thr Tyr Lys Gln Arg Ile Phe Asn Gly Cys Ile Ile Ile Asn
                            120
                                                125
Asp Asp Phe Gly Phe Ser Phe Glu Leu Pro Ala Pro Tyr Asp Glu Ile
                        135
                                            140
Ala Asp Ser Ile Ala His Val Pro Leu Asp Leu Val Leu Asn Glu Ile
                   150
                                       155
Arg Val Ala Asp Tyr Ser Asp Trp Asn Pro Gln Lys Ile Lys Arg
                165
                                   170
<210> 10707
<211> 182
<212> PRT
<213> Enterobacter cloacae
<400> 10707
Ile Ile Met Ile Thr Met Glu Asp Ser Met Glu Ser Arg Met Ile Lys
```

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10
Ala Thr Phe Leu Ile Val Leu Pro Leu Phe Ser Ile Phe Thr Tyr Ala
                                25
Gly His Asn Lys Met Asn Gln Asp Ser Leu Trp Gln Met Ile Lys Glu
                            40
Met Lys Ser Val Trp Gly Lys Gln Val Glu Asp Val Ser Lys Leu Phe
                        55
Asn Gln Pro Leu Ile Asn Asn Thr Gln Glu Lys Glu Asp Arg Tyr Thr
                                        75
Ser Ala Pro Phe Thr Leu Thr Asp Gly Thr Arg Ile Ser Asn Val Asp
Val Arg Leu Trp Gly Asn Gly Asp Asn Ser Val Ser Leu Val Ser Phe
            100
                                105
Val Val Asn Gln Pro Cys Ile Thr Leu Asp Gln Val Lys Ser His Phe
                            120
                                                 125
Pro Asp Leu Lys Leu Ser Asn Ile Pro Arg Gly Asn Thr Pro Gly Gln
                        135
                                             140
Ser Val Gly Tyr Arg Thr Pro Thr Asp Glu Arg Gly Leu Ala Trp Ala
                    150
                                        155
Phe Ser Phe Pro Val Leu Asn Gln Glu Cys Leu Gly Arg Val Val Met
                165
                                    170
Ser Arg Tyr Glu Gln
            180
<210> 10708
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10708
Asn Thr Gln Arg Pro Ser Gln Arg Arg Trp Asp Tyr Tyr Tyr Arg Asn
Asn Leu Val Arg Glu Glu Arg Asp Asp Asn Pro Phe Lys Trp Tyr Arg
Trp Gln Tyr Asp Arg Gln Cys Arg Ala Ser Pro Gly Ser Gly Arg His
Ala Gly Arg Arg Gly Ala Gly Gly Leu Gly Cys Ser Arg
   50
<210> 10709
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 10709
Arg Pro Asn Pro Arg Asn Arg Lys Lys Pro Gln Thr Gln Val Ser Phe
                                    10
Arg Tyr Asp Pro Leu Gly Arg Arg Ile Ser Lys Thr Arg Arg Gln Lys
                                25
Leu Gly Gly Gln Pro Thr Gly Lys Pro Ser Pro Pro Gly Val Ser Gly
                            40
                                                45
Asn Asp Cys Leu Leu Gly Glu Ala His Gly Asp Val Leu Phe Thr Tyr
                        55
Val Asp Glu Ser Gly Gln Asp Asn Tyr Asp Leu Leu Ala Arg Val Asp
                    70
                                        75
Ser Val Asp Ala Ser Tyr Ile Phe Trp Val His Cys Gln Ser Asn Gly
               85
                                    90
Thr Ala Gln Leu Ile Thr Asp Ile
                                105
```

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<211> 82
<212> PRT
<213> Enterobacter cloacae
<400> 10710
Cys Phe Ser Ile Thr Ile Ile Trp Asn Lys Asn Lys Ser Leu Gly Asn
Ile Met Ser Asp Lys Ile Met Gln Thr Val Asp Leu Leu Ile Ser His
            20
                                25
Ser Gln Ile Leu Leu Arg Ser Arg Asp Tyr Asp Glu Lys Leu Ser Gln
                                                 45
                            40
Trp Gly Lys Gly Asn Val Ser Gln Gly Ala Val Leu His Lys Asp Tyr
                        55
Ala Val Phe Val Leu Pro Gln Gly Thr Gly Ile Arg Ala Met Gln
                    70
                                        75
Cys Glu
<210> 10711
<211> 83
<212> PRT
<213> Enterobacter cloacae
<400> 10711
Leu Pro Phe Trp Val Asn Ser Leu Gly Gly Pro Val Asn Arg Glu Glu
Thr Gly Leu Phe Arg Glu Ile Phe Met Lys Ala Arg Glu Ser Val Ile
            20
Pro Phe Pro Ile Gly Ile Lys Gly Leu Leu Phe Gln Trp Glu Met Arg
Pro Val Phe Ala Leu Pro Asp Lys Leu Gly Gly Ile Gln Asn Ser Phe
                        55
Ile Glu Leu Met Asn Val Tyr Ala Glu Lys Thr Gly Ser Asp Gln Tyr
                    70
His Leu
<210> 10712
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 10712
Thr Leu Met Gly Phe Leu Arg Arg Trp Phe Lys Ser Gln Ala Gln Phe
                                    10
Phe Phe Trp Thr Tyr Val Pro Ile Ile Leu Thr Phe Ile Phe Gly Tyr
            20
                                25
Val Leu Asp Val Tyr Phe Pro Glu Val Ser Gln Gly Phe Ile Leu Leu
                            40
Phe Tyr Leu Val Thr Leu Gly Leu Ala Tyr Trp Ile Trp His
                        55
<210> 10713
<211> 115
<212> PRT
<213> Enterobacter cloacae
<400> 10713
Leu Ile Gly Cys Trp Thr Gly Arg Arg Arg Leu Ile Asp Ser Val Arg
Ser Gly Ala Leu Ile Leu Thr Leu Ser His Arg Ala Glu Gly Ser Pro
```

```
20
                                25
Gln Asn Asn Ala Cys Thr Asp Gly Pro Leu Ser Leu Glu Gly Glu Gly
                           40
                                                45
Trp Gly Glu Gly Glu His Thr Ala Leu Val Val Ile Pro Phe Thr Leu
                        55
Cys Ser Leu Leu Cys His Asp Met Thr Gly Glu Arg Ala Arg Val
                    70
                                        75
Ala Gln Ser Pro Pro Pro Trp Arg Pro Gly Leu Pro Ala Glu Asn Arg
                                    90
Arg Phe Ala Val Pro Ser Ala Tyr Ser Phe Arg Leu Ile Gly Asp Gly
Arg Arg
        115
<210> 10714
<211> 252
<212> PRT
<213> Enterobacter cloacae
<400> 10714
Cys Tyr Phe Thr Leu Leu Thr Glu Thr Met Thr His Ala Val Ser Pro
                                    10
Ser Glu Leu Ser Lys Leu Pro Thr Asn Lys Thr Lys Arg Leu Tyr Arg
            20
Leu Pro Ala Arg Phe Tyr Gly Tyr Gln Leu Phe Val Leu Ile Val Leu
                            40
Ala Leu Leu Phe Thr Trp Leu Ser Arg Asp Glu Ser Leu Asp Arg Trp
                        55
Ile Thr Gly Phe Trp Tyr Asp Ala Ala Thr His His Phe Pro Leu Gln
                    70
                                        75
Gln Asn Pro Leu Leu Asp Leu Leu Asn His Arg Leu Ala Lys Tyr Val
                                    90
Ala Ile Ala Leu Ala Val Ile Ala Leu Val Tyr Gly Thr Tyr Arg Arg
                                105
Asn Ala Arg Leu Val Thr Ala Ala Leu Leu Met Gly Leu Gly Ala Leu
                            120
Val Val Gly Ala Leu Lys Ser Met Ser His His Ser Cys Pro Trp Asp
                        135
                                            140
Leu Val Glu Tyr Gly Gly Lys Ala Val Ser Tyr Pro Leu Phe Ser Ala
                   -150
                                        155
Ile Pro Ala Asp Ser Gly Pro Gly Arg Cys Phe Pro Gly Gly His Ala
                                    170
                165
                                                        175
Ser Ser Gly Phe Met Val Met Gly Leu Phe Phe Ala Phe Trp Arg Glu
            180
                                185
                                                    190
Arg Pro Arg Leu Ala Trp Thr Phe Val Ala Leu Gly Val Val Met Gly
       195
                            200
                                                205
Leu Leu Met Gly Phe Gly Gln Val Met Arg Gly Ala His Phe Phe Ser
                        215
                                            220
His Asn Leu Trp Ala Gly Trp Trp Val Trp Phe Ser Gln Val Leu Val
                   230
                                       235
Tyr Gly Leu Val Ser Ala Trp Phe Ala Lys Glu
                245
<210> 10715
<211> 242
<212> PRT
<213> Enterobacter cloacae
<400> 10715
Ser Ala Arg Ser Val Ser Met Tyr His Ser Glu Glu Ile Ile Arg Gln
```

```
Leu Gln Ser Gln Lys Ile Leu Ala Met Lys Leu Asp Arg Ala Val Arg
                                25
Asp Val Gly Glu Glu Val Lys Ser His Leu Asn Asn Ile Gly Ala Gly
                            40
Ala Gln Arg Leu Leu Tyr Tyr Thr Ser Cys Phe Thr Asp Glu Tyr Tyr
                        55
Asp Val Cys Thr Arg Gln Asn Leu Glu Asp Ala Arg Phe Arg Lys Gly
                    70
                                        75
Ile Phe His Leu Ile Ser Arg Trp Asn Ile Val Phe Asp Leu Ile Asn
Thr Tyr Val Glu Glu Leu Val Lys Asp Tyr Ser Pro Ala Glu Leu Ser
            100
                                105
Ala Ile Gln His Ala Leu Met Arg Ala Asn Val Tyr Ile Ser Thr Ser
                            120
Thr Leu Thr Ser Tyr Ser Phe Ser Ala Gly Val Ala Ser Thr Val Cys
                        135
                                            140
Leu Tyr Val Thr Leu Pro Pro Ser Gly Leu Lys Val Val Ser Gly Leu
                    150
                                        155
Thr Gly Ala Ala Ile Gly Gly Leu Gly Ile Tyr Gly Val Val Gln Lys
                165
                                    170
Ala Ala Asp Ser Ala His Arg Leu Gln Val Met His Pro Ala Tyr Tyr
            180
                                185
Gln Ala Leu Tyr Leu Gln Glu Leu Glu Met Met Tyr Phe Leu Val Glu
        195
                            200
Pro Ala Phe Met Arg Ala Gly Val Leu Thr Gln Gln Trp Thr Asp Ser
                        215
                                            220
Gln Ser Pro Tyr Asp Ala Ala Asp Thr Ile Leu Lys Leu Met Gly Arg
225
                    230
                                        235
His
```

<210> 10716 <211> 639 <212> PRT

<213> Enterobacter cloacae

<400> 10716

Ser Ile Thr Asp Lys Asp Leu Thr Pro Met Lys Lys Met Leu Thr Leu Ser Leu Leu Ala Leu Cys Val Ser His Gly Ala Ala Ala Ala Asn Tyr Ala Leu Ser Asn Asp Asn Ile Ala Leu Ser Phe Asp Asp Ala Asn Ala Thr Val Val Val Thr Asp Ser Lys Ser Asn His Pro Leu Thr Pro Gln Glu Leu Phe Phe Leu Thr Leu Pro Asp Glu Thr Lys Ile His Thr Ala 75 Asp Phe Lys Ile Lys His Val Glu Lys Gln Asp Asn Ala Ile Val Ile 8.5 90 Asp Phe Thr His Pro Asp Phe Asn Val Thr Val Lys Leu Asn Leu Val 105 110 Lys Gly Lys Tyr Ala Ser Ile Gly Tyr Thr Ile Ala Ala Val Gly Gln 120 Pro Arg Asp Val Ala Lys Ile Thr Phe Phe Pro Thr Lys Lys Gln Ser 135 140 Gln Ala Pro Tyr Val Asp Gly Ala Ile Asn Ser Ser Pro Ile Val Ala 150 155 Asp Ser Phe Phe Ile Leu Pro Asp Lys Pro Ile Val Asn Thr Tyr Ala 165 170 175 Tyr Glu Ala Thr Thr Asn Leu Asn Val Glu Leu Lys Thr Pro Ile Leu 185

Pro Glu Thr Pro Val Ser Phe Thr Trp Phe Gly Thr Phe Pro Glu 200 Thr Asn Gln Leu Arg Arg Ser Val Asn Gln Phe Ile Asp Ala Val Arg 215 220 Pro Arg Pro Tyr Lys Pro Tyr Leu His Tyr Asn Ser Trp Met Asp Ile 230 235 Gly Phe Phe Thr Pro Tyr Ser Glu Gln Asp Val Ile Gly Arg Met Asp 250 245 Glu Trp Asn Lys Glu Phe Ile Ala Gly Arg Gly Val Ala Leu Asp Ala 260 265 Phe Leu Leu Asp Asp Gly Trp Asp Asp Arg Thr Gly Arg Trp Leu Phe 280 Gly Pro Ala Phe Ser Asn Gly Phe Gly Lys Val Arg Glu Lys Ala Asp 295 300 Ser Leu His Ser Ser Val Gly Leu Trp Leu Ser Pro Trp Gly Gly Tyr 310 315 Asn Lys Pro Arg Asp Ile Arg Val Ser His Ala Lys Glu Tyr Gly Phe 325 330 Glu Thr Val Asp Gly Lys Leu Ala Leu Ser Gly Pro Asn Tyr Phe Lys 340 345 Asn Phe Asn Asp Gln Ile Ile Lys Leu Ile Lys Asn Glu His Ile Thr 360 365 Ser Phe Lys Leu Asp Gly Met Gly Asn Ala Asn Ser His Ile Lys Gly 380 375 Ser Pro Phe Ala Ser Asp Phe Asp Ala Ser Ile Ala Leu Leu His Asn 395 390 Met Arg Ser Ala Asn Pro Asn Leu Phe Ile Asn Leu Thr Thr Gly Thr 405 410 415 Asp Ala Ser Pro Ser Trp Leu Phe Tyr Ala Asp Ser Ile Trp Arg Gln 420 425 430 Gly Asp Asp Ile Asn Leu Tyr Gly Pro Gly Thr Pro Val Gln Gln Trp 440 Met Thr Tyr Arg Asp Ala Glu Thr Trp Arg Ser Ile Val Arg Lys Gly 455 460 Pro Leu Phe Pro Leu Asn Ser Leu Met Tyr His Gly Ile Val Ser Ala 470 475 Glu Asn Ala Tyr Tyr Gly Leu Glu Lys Val Gln Thr Asp Ser Asp Phe 485 490 Ala Asp Gln Val Trp Ser Tyr Phe Ala Thr Gly Thr Gln Leu Gln Glu 505 Leu Tyr Ile Thr Pro Ser Met Leu Asn Lys Ala Lys Trp Asp Thr Leu 520 Ala Gln Ala Ala Lys Trp Ser Arg Glu Asn Ala Ser Val Leu Val Asp 535 Thr His Trp Ile Gly Gly Asp Pro Thr Ser Leu Gln Val Tyr Gly Trp 550 Ala Ser Trp Ser Lys Asp Lys Ala Ile Phe Gly Leu Arg Asn Pro Ser 565 570 Asp Lys Pro Gln Arg Tyr Tyr Leu Asp Leu Thr Lys Asp Phe Glu Ile 585 Pro Ala Gly Glu Arg Ser Gln Phe Thr Leu Lys Ala Val Tyr Gly Ser 595 600 Asn Ser Thr Val Pro Glu Glu Tyr Lys Asn Ala Val Val Ile Thr Leu 615 620 Gln Pro Leu Glu Thr Leu Val Phe Glu Ala Met Pro Gly Lys 630 635

<sup>&</sup>lt;210> 10717

<sup>&</sup>lt;211> 98

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

```
5931
<400> 10717
Thr Ser Thr Cys Ile Ala Arg Leu Leu Pro Pro Pro Val Val Lys Ile
                                    10
Tyr Pro Gly Arg Thr Gly Ala Gly Gly Arg Thr Arg Leu Ala Val Pro
                                25
Ala Cys Gly Trp Arg Tyr Arg Gln His Ala Asp Val Gly Asp Cys Asp
Gly Gly Gly Arg Leu Pro Val Arg Asp Pro Asn Arg Gly Gly Asp Pro
                        55
                                             60
Asp Tyr Ser Asp His Asp Asp Gly Arg Tyr Gly Asp Arg Thr Ser Ala
                                        75
                    70
Gly Ala Ala His His Ala Ala Gly Gly Glu Pro Ala Val Ala Tyr His
                85 .
                                    90
Ala Ala
<210> 10718
<211> 124
<212> PRT
<213> Enterobacter cloacae
<400> 10718
Ala Trp Ala Leu Gly Phe Lys Ala Ile Asn His Ala Gly Ser Lys Met
```

Leu Cys Val Gly Gly Gly Arg Ala Ile Ala Thr Thr Glu Asp Phe Val 20 Ala Val Glu Gln Arg Leu Asn Gln Cys His Arg Cys Thr Arg Asp Arg Val Arg Lys Gly Phe Arg Arg Gly Asn Leu Arg Leu Asn Ala Phe Cys 55 Glu Ala His Phe Asn Ser Phe Glu His Gly Ile Pro Leu Lys Ser Tyr 70 Leu Cys Val Phe Ala Lys Arg Val Phe Lys Pro Val Asp Arg Ile Ser 90 Gly Glu Gly Tyr His Ile Glu Thr Ala Ile His Ser Ile Lys Thr Pro Ile Met Ala Gly Lys Pro Gln Val Gly Ser Leu

<210> 10719 <211> 135 <212> PRT <213> Enterobacter cloacae

<400> 10719 Val Asp Asn Val Leu His Gln His Ser Trp Lys Arg Ala Ala Ala Leu 10 Thr Ala Leu Phe Ala Ile Leu Leu Ile Val Val Ala Pro Leu Ile Ser 25 Val Ser Leu Gln Lys Asp Pro Met Ser Ala Met Pro Gly Met His His 40 45 Asp Met Ser Met Met Ser Val Asp Glu His His Gly Asp Met Pro His 55 Ser Met Pro Val Asp His Ala Glu Ala Cys Gly Tyr Cys Val Leu Leu 70 75 Ala His Val Pro Gly Val Met Leu Ala Leu Ile Val Leu Leu Ser Val 85 90 Val Leu Gln Arg Leu Arg Val Lys Pro Pro Arg Gln Ala Val Ser His 105 Trp His Phe Pro Trp Leu Tyr Pro Asp Thr Arg Ala Pro Pro Arg

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120
                                                 125
Arg Ser Ala Phe Ser Leu
    130
<210> 10720
<211> 93
<212> PRT
<213> Enterobacter cloacae
<400> 10720
Arg Gly Ser Ile Asn Trp Leu Ser Cys Pro Ser Ala Arg Asp Trp Ala
Ser Ala Arg Ala Ser Trp Asn Leu Leu Val Arg Arg Ser Arg Arg Ile
Thr Pro Pro Ile Thr Gly Gln Ile Cys Tyr Trp Arg Leu Asn Glu Val
                            40
Ile Pro Gln Leu Phe Lys Val Asn Asn Leu Asn Tyr Val Lys Arg Lys
Arg Arg Val Pro Asp Arg Leu Asp Ser Leu Gly Tyr Ile Ser Gln Met
                    70
Lys Leu Ala Ile Arg Pro Val Val Leu Ser Arg Arg
                85
<210> 10721
<211> 97
<212> PRT
<213> Enterobacter cloacae
<400> 10721
Leu Leu Lys Cys Lys Phe Met Ser Ala Leu Arg Ile Glu Leu Glu Lys
                                     10
Gly Phe Thr Asn Glu Gly Val Val His Glu Leu Ser Trp Ile Pro Gly
Val Gln Thr Gly Arg Gly Leu Cys Ala Ile Pro Pro Gly Lys Gly Ile
                            40
                                                 45
Asp Leu Trp Gln Lys Lys Pro Arg Lys Thr Gln Ser Phe Thr Tyr Arg
Phe Ala Ser Tyr Ala Phe Phe Cys Ile His Pro Glu Asp Lys Ser Phe
                                         75
Ser Gly Ile Thr Thr Gln Cys His Thr Pro Glu Asn Cys Tyr Glu Cys
<210> 10722
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10722
Ser Gly Phe Asn Lys Ser Leu Asn Arg Val Tyr Ser Gly Val Val Tyr
Cys Thr Lys Arg Ser Arg Glu Arg Met Leu Gln Arg Thr Tyr Asp Ser
                                25
Ile Arg Phe Ser Gly Ser Ala Tyr Val Ala Gly Tyr Arg Arg Val Gln
                            40
Ala Ala Tyr Ala Ala Ser Arg Val Ser Pro Leu Ser
<210> 10723
<211> 127
```

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<212> PRT
<213> Enterobacter cloacae
<400> 10723
Thr Ser Leu Gly Thr Gly Gly Ser Thr Val Met Gln Val Pro Glu Leu
                                    10
Thr Asp Asp Ala Val Val Glu Leu Ala Arg Glu Gly Gly Val Ala Phe
                                25
Ile Pro Lys Leu Ser Gly Gln Arg Thr Ile Ala Leu Ser Thr Leu Asn
Glu Ala Gln Arg Gln Arg Val Val Asn Ile Leu Glu Gln Ala Ile Pro
                        55
Arg Gly Gln Pro Pro Gly Gln Ala Ser Ser Pro Gly Ser Gly Asp Gln
                    70
                                        75
Arg Tyr Phe Arg Ile Gln Ile Ile Trp Thr Arg His Asn Gln Ala Gln
Tyr Thr Asp Ile Ile Val Leu Val Pro Glu Gln Glu Ala Pro Glu Ser
            100
                                105
Leu Ile Glu Leu Trp Gln Lys Gly Glu Gly Cys Val Cys Asp
                            120
                                                 125
<210> 10724
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 10724
Arg Phe Ile Lys Gly Ile Leu Arg Val Asp Ile His Asp His Thr Gln
                                    10
Ile Ser Glu Gln Gly Val Ala Asp Leu Leu Ala Asp Thr Glu Phe Ala
            20
Gly Asn His Ser His Leu Pro Gly Asn Ile Thr Tyr Thr Leu Cys Ala
                            40
Gly Asn Ile Ser Leu Phe Lys Leu His Asp Ala Thr Gly Lys Pro Phe
                        55
Gln Ile Gln Pro Phe Arg Val Gly Ser Asp His Arg Val Ile Gly Gly
Leu Thr Glu Leu Leu Tyr Lys Leu Tyr Ile Thr Thr Arg Ile Tyr Cys
                                    90
Gly Ile Gly Asp Asp Phe Leu Glu
            100
<210> 10725
<211> 284
<212> PRT
<213> Enterobacter cloacae
<400> 10725
Phe Pro Leu Arg Asp Ser Asp His Lys Phe Ser Ile Pro Ile Phe Ser
                                    10
Leu Glu Pro Val Pro Ser Ser Val Ile Leu Ser Ile Thr Leu Trp Ser
                                25
Gln Glu Met Ser Arg Lys Ile Met Val Val Thr Ala Ala Tyr Gly Ala
                            40
Asp Gln Val Arg Gln Ala Gly Gly Gln Arg Ala Met Leu Pro Val Ile
                        55
Ala Gly Ala Gly Ala Asp Gly Val Glu Ile Arg Arg Glu Leu Phe Ser
                    70
                                        75
His Asp Glu Leu Met Ala Leu Pro Ala Leu Gly Glu Ser Ile Glu Leu
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90

Leu Gly Leu Leu Ala Cys Tyr Ser Ala Pro Ala Pro Leu Phe Met Pro

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100
                                105
                                                    110
Asp Gly Thr Leu Asn Pro Asp Leu Pro Arg Tyr Leu Ser Glu Ala Ser
                          120
                                               125
Ala Leu Asn Ala Leu Trp Leu Lys Val Ser Leu Gly His Phe Ser Asp
                       135
                                            140
Lys Gln Pro Leu Glu Ala Leu Arg Ala Leu Leu Asp Glu Ser Gly Met
                   150
                                       155
Thr Leu Val Val Glu Asn Asp Gln Thr Asp Cys Gly Gln Leu Ala Pro
               165
                                    170
Met Gln Arg Phe Lys Ala Ala Cys Arg Val Met Ala Leu Pro Val Thr
                                185
Leu Thr Phe Asp Met Gly Asn Trp Leu Trp Val Gly Asp Ser Pro Glu
                            200
Glu Ala Ala Arg Gln Leu Ala Pro Ala Val Ser Tyr Ile His Val Lys
                        215
                                            220
Ala Ala Val Pro His Lys Ala Gln Phe Arg Ala Val Ala Pro Asp Gln
                    230
                                        235
Thr Asp Ser Arg Trp Arg Asp Leu Leu Asn Gln Leu Pro Ala Asp Ala
                245
                                    250
Pro Arg Gly Ile Glu Phe Pro Leu Glu Gly Thr Asp Leu Thr Ala Val
                                265
Thr Arg His Tyr Val Asn Leu Leu Arg Glu Glu
<210> 10726
<211> 96
<212> PRT
<213> Enterobacter cloacae
<400> 10726
Met Thr Ser Val Ile Phe Ile Lys His Lys Lys Thr Pro Pro Lys Arg
                                    10
Gly Phe Phe Leu Phe Arg Ser Ser Asp Arg Cys Ala Pro Gly Leu Ala
    . 20
                                25
Lys Gly Leu Met Leu Gly Arg Glu Arg Thr Asp Gln Arg Val Ile Leu
        35
                            40
Ala Arg Leu Leu Gly Gly Arg Glu Leu Asp Thr Val Arg Asp Lys Ala
                        55
His Leu Arg Thr Leu Phe Thr Asn Lys Val Thr His Leu Asp Gln Leu
                    70
Leu Ser Lys Asp Leu Arg Arg Arg Asp Gln Arg Leu Gln Ser Val
<210> 10727
<211> 249
<212> PRT
<213> Enterobacter cloacae
<400> 10727
Gly Gly Thr Met Asn Asp Ala Ile Ile Thr Asp Asn Glu Arg Ile Asn
                                    10
Ile Glu Pro Lys Asp Val Met Val Lys Gly Ser Asn Lys Lys Gln Gly
            20
                                25
Val Asn Ala Gln Thr Ser Thr Gln Arg Arg Pro Glu His Gln Gly Met
                            40
Ala Lys Val Ile Ile Asn Pro Gly Thr Pro Asp Phe Asn Arg Phe Leu
                        55
                                            60
Thr Ala Arg Asn Gly Ala Val Ile Arg Gly Phe Asp Asp Val Ser Ile
                   70
                                        75
Ala Ile Ser Ser Leu Phe Lys Thr Val Asp Ala Val Lys His Pro Asp
```

Leu Val Gln Ala Ile Gln Asp Trp Phe Asn Glu Leu His Glu Glu Asn 100 105 Asn Lys Met Lys Glu Asn Leu Val Ala Tyr Ile Lys Ser Ile Glu Phe 120 125 Asp Lys Asn Asp Ser Phe Met Ser Ser Thr Gln Phe Val Pro Phe Ser 135 Phe Glu Pro Val Gln Leu Asn Phe Asn Asn His Asn Thr Met Arg Phe 150 155 Tyr Lys Tyr Ile Phe Glu Met Asn Gln Leu Met Asn Thr Met Tyr Glu 165 170 175 Tyr Asn Ser Leu Gly Leu Leu Ala Val Ser Asp Tyr Pro Val Met Ser 190 180 185 His Asn Ile Ile Lys Ser Ile Asn Leu Tyr Val Glu Asn Val Lys Lys 200 205 Thr Leu Asn Val Ser Arg Arg Lys Asp Gly Pro Tyr Ser Pro Ala Glu 215 2.20 Phe Ile Thr Lys Val Met Gln Tyr Lys Ser Val Gln Ala Tyr Ile Ala 230 235 Ala Glu Leu Ser Gly Lys Arg Arg 245

<210> 10728 <211> 308 <212> PRT

<213> Enterobacter cloacae

<400> 10728 Gly Met Met Met Asn Phe Arg Ala Leu Tyr Leu Cys Ile Lys Arg Ile 10 Leu Gly Ile Phe Ser Ser Gln Glu Asn Asp Ala Thr Ser Val Met Ile 20 Glu Asp Ile Ser Ser Leu Ser Pro Phe Ala Gln Ile Leu Gly Asp Gln 40 Lys Tyr Thr Val Pro Asp His Pro Asn Pro Glu Val Leu Lys Phe Ile 55 Glu Tyr Pro Thr Arg Pro Thr Gly Ile Gln Thr Phe Asn Glu Gln Ser 70 Ile Leu Ser Leu Tyr Arg Glu Lys Leu His Ser Ile Ser Met Met Leu 85 Ala Ile Ser Asp Ser Asp Ile Arg Asp Asp Ala Tyr Thr Phe Thr Asn 100 105 110 Leu Val Leu Lys Pro Leu Val Glu Tyr Val Arg Trp Ile His Leu Leu 120 125 Pro Ala Ser Glu Asn His His Asn Gly Ile Gly Gly Leu Leu Ser 135 140 His Ser Leu Glu Val Ala Ile Leu Ser Leu Lys Asn Ala His His Ser 150 155 Glu Leu Arg Pro Ile Gly Tyr Gln Asp Glu Glu Val Val Arg Arg Lys 165 170 Val Tyr Leu Tyr Ala Ala Phe Ile Cys Gly Leu Val His Asp Ala Gly 180 185 190 Lys Val Tyr Asp Leu Asp Ile Val Ser Leu Asn Leu Ala Ser Pro Ile 195 200 205 Ile Trp Thr Pro Ser Ser Gln Ser Leu Leu Asp Trp Ala Arg Glu Asn 215 220 Asp Val Val Glu Tyr Glu Ile His Trp Arg Lys Arg Ile His Asn Gln 230 235 His Asn Ile Trp Ser Ser Val Phe Leu Glu Arg Ile Leu Asn Pro Val 245 250 Cys Leu Ala Phe Leu Asp Arg Val Asn Lys Glu Arg Val Tyr Ser Lys 265

<400> 10731

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Met Ile Thr Ala Leu Asn Val Tyr Thr Asp Gly Asn Asp Phe Leu Ser
                            280
Lys Cys Val Arg Thr Ala Asp Phe Tyr Ser Thr Gly Thr Asp Leu Asn
                        295
                                             300
Val Leu Arg
305
<210> 10729
<211> 208
<212> PRT
<213> Enterobacter cloacae
<400> 10729
Arg Pro Leu Pro Asn Gly Gly Asn Ser Glu Cys Ile Thr Ser Val Gln
                                    10
Phe Pro His Gln Arg Ala Phe Lys Asn Leu Leu Phe Val Lys Lys Asn
            20
                                25
                                                     30
Gly Asn Phe Leu Arg Tyr Ser Asn Phe Thr Ser Gly Gly Val Met Ser
                            40
Asn Ser Asn Leu Ile Ser Ser Ile Glu Leu Thr Arg Lys Asn Leu Arg
                        55
Ala Gln Ile Glu Gly Leu Arg Val Glu Ala Glu Asp Leu Ile Thr Lys
                    70
                                         75
                                                             80
Tyr Trp Ile Lys Trp Lys Glu Arg Asn His Gln Glu Ile Asn Leu Thr
                85
                                     90
Arg His Ser Lys Val Pro Lys Arg Glu Tyr Leu Gly Ser Tyr Ala Pro
            100
                                105
                                                     110
Lys Val Glu Leu Ile Gly Asn Ala Arg Lys Val Thr Ile Thr Trp His
                            120
Gln Phe Ser Pro Tyr Lys Thr Arg Ala Pro Ser His Met Ser Lys Arg
                        135
Val Gln Pro Met Lys Ser Gly Lys Tyr Ser Lys Asn Cys Phe Val Asn
                    150
His Ala Ser Trp Glu Tyr Glu Met Ile Ser Glu Thr Glu Ala Leu Leu
                                     170
Glu Pro Tyr Arg Glu Met Leu Glu Leu Tyr His Ser Ala Tyr Ile Glu
Leu Gly Arg Lys Ile Arg Gln Tyr Ser Lys Thr Lys Val Ala Gln
                            200
<210> 10730
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10730
Leu Asn Ile Ser Asn Lys Ile Phe Phe His Leu Ile Val Phe Phe Met
                                    10
Gln Leu Val Glu Pro Ile Leu Asn Ser Leu Asn Lys Val Arg Met Phe
            20
                                25
Asn Cys Ile Asn Arg Phe Lys Glu Arg Gly Asn Ser Asp Thr His Ile
                            40
Ile Lys Thr Ser Asp Asp Cys Ser Ile Ser Gly Ser
                        55
<210> 10731
<211> 64
<212> PRT
<213> Enterobacter cloacae
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 Ser Ser Lys
 Ile Ser Ile Ala Phe Gly Thr Leu Ser Lys
 Val Lys Gly

 1
 5
 10
 15

 Arg Ser Val Ile Asp Thr Arg Cys
 Glu Glu Val Met Lys
 Pro Pro Ala 30

 Ile Phe Asn Lys
 Ser Phe Phe Asp Ser Lys
 Ser Lys
 Ser Lys
 Leu Leu 45

 Thr Phe Ile Thr Ser Leu Ser Asp Leu Ala Phe Lys
 Thr Lys
 Glu Glu Val Met Lys
 Thr Lys
 Glu Leu Leu 60

<210> 10732

<211> 112

<212> PRT

<213> Enterobacter cloacae

<400> 10732

 Leu Glu Gln Gln Phe Gln Arg Val Ser Leu Phe Ala Phe Pro Trp Leu Phe

 1
 5
 7
 8
 10
 7
 15
 15

 Pro Ile Thr Val Cys Arg Val Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Pro Ileu Phe Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu Phe Pro Ileu Phe Pro Ileu Phe Ileu Phe Pro Ileu

105

<210> 10733

<211> 207

<212> PRT

<213> Enterobacter cloacae

100

<400> 10733

His Ser Gly Ile Leu Ile Pro Ala Thr Pro Glu Thr Ser Asp Ile Leu Gln Ser Lys Thr Arg Leu Gly Asp Val Leu Val Ala Glu Phe Arg Arg Val Arg Lys Pro Ala Phe His Arg Arg Phe Phe Ala Leu Leu Asn Leu Gly Phe Glu Tyr Trp Glu Pro Thr Gly Gly Ala Ile Ser Ser Asn Glu 75 Arg Lys Leu Ile Thr Gly Tyr Ala Lys Leu Leu Ala Ser Tyr Gly Gly 90 Asn Glu Gly Ala Leu Ile Asp Ala Ala Glu Gln Tyr Leu Glu Gln Val 100 105 110 Ala Tyr Arg Arg Val Thr Asn Gly Ile Ser Leu Cys Lys Ser Phe Asp 120 125 Ala Tyr Arg Ser Trp Val Ile Val Glu Ala Gly His Phe Asp Ala Ile 135 140 Gln Leu Pro Asp Gly Thr Leu Lys Lys His Pro Arg Ser Ile Ser Phe 150 155 Ala Asn Met Asp Glu Phe Glu Phe Gln Gln Leu Tyr Lys Ala Ala Leu 165 170 Asp Val Leu Trp Arg Trp Val Leu Ser Arg Ser Phe Arg Ser Arg Asp 185

Glu Ala Glu Asn Val Ala Ala Gln Leu Leu Gly Phe Ala Gly

Cys Ala Thr Glu Arg Thr Met Ala Leu Glu Leu Gln Leu Ile Lys His

Ala Glu Gly Arg Phe Ser Arg Thr Phe Leu Gln Ser Val Gln Pro Ala 1 5 10 15

Arg Gly Asn Glu Cys Cys Asp His Phe His Arg Glu Ala Pro Gly Thr 20 25 30

Thr Pro Ser Val Ile Ala Asn Leu Ala Ile Tyr Ala Cys Phe Ser Glu 35 40 45

Gln Ala Phe Phe Ser Phe Ile Asn His Pro Phe Asp Leu Leu Pro Val 50 55 60

Asp 65

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<210> 10735 <211> 63 <212> PRT <213> Enterobacter cloacae

<400> 10735

<400> 10734

<210> 10736 <211> 99 <212> PRT

<213> Enterobacter cloacae

<400> 10736

 Ile
 Tyr
 Ile
 Leu
 Ala
 Ile
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 Ser
 Arg
 Val
 Ala
 Cys
 Pro
 Ley
 Arg

 Leu
 Tyr
 Cys
 Ala
 Cys
 Ser
 Gly
 Glu
 Asn
 Leu
 Pro
 Ile
 Leu
 Phe
 Ser
 Gly

 Tyr
 Arg
 Ala
 Ser
 Leu
 Pro
 Phe
 Ser
 Trp
 Ala
 Glu
 Val
 Thr
 Arg
 Val

 Ser
 Glu
 Thr
 His
 Ala
 Ser
 Asp
 Glu
 Ala
 Tyr
 Ser
 Ala
 Ala
 Leu
 Ser
 Val

 Ser
 Glu
 Glu
 Ala
 Tyr
 Ser
 Ala
 Ala
 Leu
 Ser
 Val

 Feb
 Glu
 Glu
 Leu
 Val
 Glu
 Leu
 Thr
 Ile
 Val
 Ala
 Thr
 Met

 Feb
 Glu
 Glu
 Leu
 Thr
 Ile
 Val
 Ile
 Ala
 Thr
 Met
 Ala
 Ala
 Ile
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Lys Ala

<210> 10737

<211> 87

<212> PRT

<213> Enterobacter cloacae

<400> 10737

<210> 10738 <211> 274 <212> PRT <213> Enterobacter cloacae

<400> 10738 Trp Arg Lys Asp Asn Gln His Thr Ser Glu Ser Asp Asn Leu Ser Arg 10 Ser Leu Leu Gly Lys Leu Phe Arg Ser Glu Ile Ser Leu Ile Ser Ser 25 Tyr Arg Ala Cys Leu Met Leu Leu Leu Val His Gly Tyr Ser Ala Tyr 40 Gln Thr Gly Thr Pro Leu Leu Gln Arg Arg Leu Phe Gly Lys Gly Phe 55 Ser Thr Ala Ala Asp Leu Ala Phe Glu Val Glu Thr Arg Pro Gly Ser 70 75 Phe Leu Val Pro Arg Thr Leu Gly Lys Glu Ile Thr Trp Glu Arg Phe 85 90 Phe Ser Ala Val Leu Asp Gly Asp Ser Asn Val Ile Arg Glu Tyr Asp 105 Thr Asn Asp Ile Asp Tyr Gly Ile Tyr Asp Ala Gly Glu Lys Val Thr 120 Phe Leu Asn Gly Thr Val Asp Ile Tyr Asn Pro Lys Lys Ile His Glu 135 Leu Arg Ser Lys Cys Val Asp Ile Gln Asn Asp Tyr Phe Met Gln Val 150 155 Phe Phe Ile Ser Met Leu Ala Pro Glu Phe Val Ser Ile Phe Phe Gly 170 Leu Lys Pro Thr Thr Ala Asp Ala Ile Lys Asp Ile Gly Tyr Ser Ser 185 190 Leu Lys Thr Ile Asn Asp Val Val Leu Phe Pro Arg Thr Ile Ala Phe 200 Ser Gln Gly His Ile Glu Glu Ser Val Ser Leu Lys Thr Lys Val Phe 215 220 Ala Trp Ala Tyr Glu Leu Ser Ala Asp Ile Arg Leu Gly Lys Val Ser 230 235 Asp Asp Leu Met Glu Leu Leu Arg Tyr Asp Thr Met Phe Thr Ser His 250 245 Arg Gln Asp Val Phe Asn Thr Leu Thr Asn Lys Val Met Leu Lys Asp 265 Tyr

<sup>&</sup>lt;210> 10739

<sup>&</sup>lt;211> 151

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<212> PRT

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<400> 10739
  Gly Asn Lys Met Lys Lys Leu Met Met Leu Val Ile Ser Gly Thr Val
                                      10
  Leu Ala Gly Cys Val Ser Pro Ala His Ala Ile Asn Ala His Tyr Arg
                                  25
  Ala Gln Leu Glu Arg Ser Gly Cys Thr Gln Ile Ser Ala Gly Asn Gly
  Ser Cys Asp Val Ser Lys Thr Lys Ala Glu Asn Thr Ala Gln His Glu
                          55
  Pro Thr Ala Ser Val His Asp Pro Leu Arg Glu Ala Ser Phe Ser Ser
                                          75
  Asp Thr Val Asn Ala Thr Leu Ser Asn Gly Phe Phe Ser Ala Thr Val
                                      90
                  85
  Asn Gly Lys Lys Ala Ser Val Lys Arg Leu Asn Ala Asn Phe Tyr Glu
              100
                                  105
  Ile His Gly Asn Gly Phe Val Ile Ser Ile Ser Leu Asp Glu Asn Gly
                              120
                                                  125
  Ile Thr Asp Ala Ser Trp Asn Lys Thr Lys Gly Arg Glu His Gly Val
                          135
  Leu Arg Val Ser Gln Lys
  <210> 10740
  <211> 75
  <212> PRT
  <213> Enterobacter cloacae
  <400> 10740
  Gly Val Val Leu Glu Trp Lys Glu Ser Phe Arg Tyr Val Phe Asp Asn
  Gln Tyr Tyr Lys Lys Ile Phe Leu Leu Asn Glu Lys His Asn Ser Leu
              20
  Phe Asp Ile Val Phe Asn Tyr Tyr Ala Ile Ile Trp Leu Arg Ile Phe
                               40
  Thr Gly Ser Ala Ser Gly Ser Cys Trp Lys Thr Gly Asp Asp His Arg
                          55
  Lys Cys Lys Arg Ser Ser Gly Glu Ala Asp
  <210> 10741
  <211> 92
  <212> PRT
  <213> Enterobacter cloacae
  <400> 10741
  Lys Val Lys Lys Gln Met Gly Pro Glu Lys Asn Ala Asn Ile Glu
                                      10
  Pro Phe Val Thr Gly Leu Asn Gly Leu Phe Val Tyr Cys Phe Val Thr
                                  25
  Gln Gly Thr Gly Gln Gly Arg Thr Pro Phe Val Trp Gly Arg Leu His
                              40
  Phe Met Leu Asn Lys Asn Ser Ser Leu Arg Met Ile Cys Gln His Cys
                          55
  Lys Ile Arg Gln Lys Ser Val Thr Asn Arg Ala Ile Gly Arg Arg Lys
                      70
                                          75
  Gly Gly Arg Glu Pro Pro Tyr Ala Val Tyr Phe
<210> 10742
  <211> 97
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## <213> Enterobacter cloacae

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<210> 10743
<211> 74
<212> PRT
<213> Enterobacter cloacae
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<400> 10743

Pro Thr Leu Leu Gly Tyr Val Gly Thr

<210> 10744 <211> 112 <212> PRT <213> Enterobacter cloacae

<400> 10744

 Arg Glu Leu Ile
 Met Ser Gln Glu Leu Glu Phe Ser Leu His Pro Pro 1
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105

<210> 10745 <211> 64 <212> PRT <213> Enterobacter cloacae

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<400> 10745
Lys Ala Ala Cys Trp Pro Leu Pro Phe Arg Glu Ala Ile Ala Thr Gly
                                    10
Asp Gly Tyr Tyr Leu Val Trp Pro Lys Asn Ser Leu Lys Arg Glu Ser
            20
                                25
Ile Gln His Leu Leu Ala Trp Leu Gln Asn His Thr Pro Val Val Pro
                            40
Ala Leu Asp Ile Asp Tyr Leu Glu Tyr Asp Asp Ser Arg Val Tyr
<210> 10746
<211> 240
<212> PRT
<213> Enterobacter cloacae
<400> 10746
Lys Cys Val Cys Leu Ile Val Arg Leu Ser Gly Lys Ser Ile His Ser
Gly Ile Ala Arg His Ala Phe Arg Arg Asp Lys Met Lys Ile Ala Leu
            20
                                25
Met Met Glu Asn Ser Gln Ala Ala Lys Asn Pro Ile Ile Leu Asn Glu
        35
Leu Lys Ala Val Ala Asp Glu Lys Gly Phe Pro Val Tyr Asn Val Gly
    50
                        55
                                             60
Met Ser Asp Glu Asn Asp His His Leu Thr Tyr Ile His Leu Gly Ile
                                        75
                    70
Met Ala Ser Ile Leu Leu Asn Ala Lys Ala Val Asp Phe Val Val Thr
                                    90
Gly Cys Gly Thr Gly Gln Gly Ala Leu Met Ser Leu Asn Ile His Pro
                                105
            100
                                                     110
Gly Val Ile Cys Gly Tyr Cys Ile Asp Pro Ala Asp Ala Phe Leu Phe
                            120
Ala Gln Ile Asn Asn Gly Asn Ala Leu Ser Leu Pro Phe Ala Lys Gly
                        135
                                             140
Phe Gly Trp Gly Ala Glu Leu Asn Val Arg Phe Ile Phe Glu Lys Ala
                    150
                                        155
Phe Thr Gly Arg Asn Gly Glu Gly Tyr Pro Pro Glu Arg Lys Glu Pro
                165
                                    170
Gln Val Arg Asn Ala Gly Ile Leu Asn Gln Val Lys Ala Ala Val Val
            180
                                185
Lys Glu Asn Tyr Leu Asp Thr Leu Arg Ala Ile Asp Pro Glu Leu Val
                            200
Lys Thr Ala Val Ser Gly Gln Arg Phe Gln Gln Cys Phe Phe Glu Asn
                        215
                                             220
Cys Gln Asp Lys Glu Ile Glu Ala Phe Val Arg Gly Ile Val Gly
                    230
                                        235
<210> 10747
<211> 167
<212> PRT
<213> Enterobacter cloacae
<400> 10747
Ile Val Ile Met Arg Gly Thr Gly Ala Asn Met Thr Leu Asp Ala Leu
                                    10
Phe Gln Leu Met Lys Ile Ile Ser Pro Ser Glu Thr Pro Ser Asp Gly
                                25
Asn Leu Ala Asn Phe Met Thr Met Leu Ile Ser Thr Lys Asn His Ser
                            40
                                                 45
Asp Ala Leu Leu Pro Phe Ser Gln Arg Ala Tyr Met Leu Ser Val Ala
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Tyr Ser Asp Pro Gln Lys Ala Ala Ala Leu Leu Ser Ser Cys Gln Pro
                    70
                                        75
Gly Ala Gly Asn Pro Leu Pro Leu Leu Asn Phe Ser Gly Trp Pro Asp
                85
                                    90
Val Arg Tyr Ala Thr Ser Gly Glu Leu Gln Thr Pro Glu Ser Glu Asp
           100
                                105
Tyr Phe His Lys Ile Ser Ser Ala Ala Thr Leu Leu Arg Ala Ala Ile
                            120
Ile Asp Ala Glu Gln Gln Lys Asn Thr Pro Ala Phe Tyr Ile Leu Asp
                        135
Lys Val Leu Ser Leu Asn Ser Ala Leu Pro Glu Arg Tyr Lys Lys Met
                    150
Ala Asn Ile Ser Tyr Ser
                165
<210> 10748
<211> 270
<212> PRT
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<213> Enterobacter cloacae

<400> 10748

Glu Thr Ile Ala Val Met Glu Asn Val Lys Gln Ser Ala Pro Pro Pro 10 Asp Phe Val Val Glu Ala Met Gly Glu Tyr Val Glu Lys Tyr Ile Thr 20 25 Ala Ile His Phe Ile Pro Arg Asp Asp Arg Asp Pro Pro Gly Asp 40 His Trp Gly Thr Gly Trp Leu Val Glu Glu Cys Asn Arg Pro Leu Leu 55 Ala Thr Cys Glu His Val Ala Ser Lys Gln Leu Gln Gly Ile Leu Gly 70 Tyr Ser Cys His Gly Ser Glu Ser Gly Ile Ser Val Gly Gly Lys Phe 85 90 Thr Val Tyr Pro Phe Glu Leu Asp Phe Ala Arg Ala Asp Ile Ser Lys 100 105 Thr Phe Asn Met Val Asp His Lys Gly Glu Cys Thr Asn Lys Glu His 120 Tyr Ala Asp Ser His Ser Pro Val Ala Asp Glu Tyr Leu Tyr Val Tyr 135 Gly Phe Pro Gly Val Asp Ala Gln Ala Gly Phe Gly Gln His Glu Ile 150 155 Arg Gly Met Gly Val Phe Leu Arg Glu Val Glu Phe Asp Pro Ser Ala 170 Phe Thr Glu Ala Pro Val Pro Val Leu Gly Glu His Ile Ser Cys Ala 185 Trp Ser Thr Asn Leu Ala Ser Pro Leu Met Gly Thr Thr Gly Asn Leu 200 Ser Leu Pro Asp Gly Met Ser Gly Ser Pro Leu Trp Asn Thr Arg Tyr 215 220 Thr Glu Val Thr Asn Ala Gly Gly Ile Trp Thr Pro Cys Asp Ser Arg 235 230 Ile Thr Gly Ile Val Trp Gly His Ser Ala Lys Met Thr Arg Leu Phe 245 250 Ala Thr Pro Val Glu Ser Phe Lys Asp Leu Leu Phe Lys 265

<sup>&</sup>lt;210> 10749

<sup>&</sup>lt;211> 61

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

5944 <400> 10749 Ser Ile His Val Val Tyr Pro Arg Gln Lys His Arg Gly Arg Leu Tyr Leu Gln Ser Pro Cys Asp Ser Lys Ser Lys Gly Gly His His Arg Leu 25 Thr Phe Ile Lys Leu Thr Phe Gly Lys Arg Ile Cys Ala Thr Ala Leu 40 Gln Trp Asp Pro Gly Lys Arg Cys Ile Asp Phe Ala <210> 10750 <211> 672 <212> PRT <213> Enterobacter cloacae <400> 10750 Gly Thr Lys Met Arg Gly Ser Lys Glu Lys Ser Met Pro Asp Val Leu 10 Asp Ser Ala Gln Leu Val Arg Ile Glu Ala Val His Arg Gly Phe Leu 25 Tyr Gln His Leu Tyr Ala Val Gly Cys Leu Leu Leu Ala Gln Lys Ala 40 Ser Val Glu Thr Val Thr Val Glu Leu Asp Glu Asp Ile Glu Leu Asn 55 Ser Arg Gln Glu Arg Ile Tyr Val Gln Val Lys Thr Arg Leu Lys Pro 75 Ile Ile Leu Ser Asp Val Ser Gly Ala Leu Ala Arg Phe Ala Glu Leu 85 90 Arg Asn Glu His Thr Asp Gly Arg Gln Gly Ser Ala Ser Phe Val 105 Ile Val Ala Asn Gln Ala Pro Gly Pro His Leu Gln Lys Met Ile Glu 120 Asp Lys Thr Leu Pro Ala Asp Val Arg Phe Ile Trp Pro Gln Ser Thr 135 140 Ala Glu Arg Tyr Pro Val Leu Pro Pro Ala Trp Asp Thr Val Ala Asp 155 Ala Ala Ala Trp Cys Ile Ala Gln Ala Glu Gln Leu Asn Phe Ser Leu 170 165 Leu Ser Pro Glu Ser Leu Ile Trp Lys Leu Ala Gly Leu Val Gln Leu 185 Ala Ala Thr Gly Gly Asp Ala Asp Gly Gln His Ala Phe Tyr Thr Arg 200 Asp Leu Pro Ala Leu Phe Glu Gln Leu Ile Val Gln Leu Gln Asp Phe 220 215

Pro Ala Pro Pro Thr Leu Tyr Arg Pro Gln Arg Glu Glu Pro Ser Phe 230 235 Val Ser Asp Glu Arg Ile Arg Ile Ile Cys Gly Leu Ser Gly Ala Gly 250 245 Lys Thr Ala Trp Ala Ala Gln Ala Gln His Ser Thr Gln Val Cys 265 Ala Tyr Tyr Asp Ala Gly Asp Leu Pro Gly Pro Ala Leu Ala Ser Thr 280 285 Leu Val Arg Glu Leu Ala Ala Arg Phe Ala Thr Gln Glu Gln Gly Gly 295 300 Leu Arg Arg Ile Leu Leu Pro Gly Ala Ser Gly Val Glu Ala Leu Arg 310 315 Thr Phe Asp Thr Phe Leu Gln Gln Arg Asn Asp Asn Leu Leu Val 330 Leu Asp Asn Ala His Arg Ile Pro Val Glu Asn Leu Arg Asp Val Leu 345 His Ala Thr Thr Arg Ile His Phe Val Leu Leu Cys Gln Pro His Asp

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360
                                                365
Asn Val Arg Gln Leu Glu Ala Met Thr Gly Leu Gln Arg Glu Ser Leu
                       375
                                            380
Gln Gly Trp Asp Ile Asp Thr Val Ala Ala Ala Val Ala Asp Leu Gly
                   390
                                        395
Gly His Ala Ser Ala Leu Gly Tyr Glu Gln Leu Arg Ser Tyr Thr Gly
                405
                                    410
Gly Leu Pro Leu Tyr Val Glu Ser Ala Ala Arg Val Ala Ala Glu Glu
                                425
Tyr Lys Gly Asp Ile Asp Thr Leu Cys Ala Glu Leu Arg Gln Gln Glu
                            440
Asn Ser Thr Glu Thr Ala Gln Glu Val Ile Leu Ser Arg Val Tyr Gln
                        455
Gly Phe Glu Pro Leu Val Gln Asn Ala Leu Ala Leu Phe Ser Leu Ser
                    470
                                        475
Asp Val Gly Leu Ser Arg Asp Glu Val Ser Gly Tyr Leu Ala Arg Ser
                                   490
Leu Asn Ile Pro Pro Asn Gly Ala Ala Thr Leu Ile Lys Lys Met Arg
                                505
Ala Thr Gly Thr Ile Glu Asn Tyr Gly Asn Gln Thr Leu Lys Val His
                            520
        515
                                                525
Asp Ala Val Arg Ala Leu Gly Leu Gln His Leu Thr Met Met Asp Val
                        535
                                            540
Asp Ile Val Asn Asn Ala Leu Leu Ala Leu Lys Asp Leu Leu Ile Glu
                    550
                                        555
Ser Leu Gln Gln Glu Arg Asp Thr Ser Arg Phe Ser Leu Leu Thr Gln
                565
                                    570
Ile Tyr Ile Lys Leu Asn Asp Val Met Thr Leu Ile Gly Leu Ser Gly
            580
                                                     590
                                585
Glu Glu Leu Phe Tyr Glu Met Gly Ile Thr Val Asp Ile Met Glu Ser
        595
                            600
Leu Lys Gln Ala Thr Ala Ser Asp Ser Leu Ala Pro Leu Gln Lys Phe
                        615
                                            620
Trp Ala Leu Asp Gly Leu Val Phe Ser Glu Leu Lys Asp Gly Val Ser
                    630
                                        635
Glu Gln Ile Ala Gln Trp Leu Glu Ala Met Gly Ala Leu Leu Thr Glu
                645
                                    650
His Glu Phe Gly Cys Pro Asp Ser Tyr Leu Cys Lys Ser Glu Asp
            660
                                665
<210> 10751
<211> 108
<212> PRT
<213> Enterobacter cloacae
<400> 10751
Val Gln Glu Thr Met Met Arg Ile Leu Cys Leu Asp Ile Pro Ala Pro
                                    10
Gly Ala Ser Leu Glu Lys Tyr Ala Pro His Leu Asn Ala Glu Ala Leu
                                25
His Ala Trp Gly Leu Tyr Lys Ser Gly Phe Ile Arg Asp Ile Tyr Phe
                            40
                                                45
Arg Gln Asp Arg Pro Gly Val Ala Ile Phe Leu Glu Cys Asp Ser Val
                        55
Asp Glu Ala Met Asn Val Met Ala Glu Phe Pro Leu Ala Lys Ala Gly
                   70
                                        75
Leu Leu Ser Phe Glu Cys Ile Pro Leu Gly Ser Phe Ile Asn Trp Glu
               85
                                    90
```

Asn Leu Phe Ala Ala Glu Phe Lys Asn Lys Glu

105

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<210> 10752
<211> 185
<212> PRT
<213> Enterobacter cloacae
<400> 10752
Asn Leu His Ser Trp Glu Trp His Asp Phe Asp Gln Glu Ser Thr Glu
Val Glu Ala Asp Glu Phe Asp Gln Tyr Asn Phe Asp Val Glu Lys Asn
                                25
Asp Val Val Thr Arg Glu Phe Trp Ala Gly Ser Val Ala Thr Gly His
Arg Tyr Ala Ile Gly Phe Val Lys Ser Glu Asn His Ser Met Leu Asn
                        55
Ser Phe Leu Gly Asn Ala Gln His Asn Gly Lys Ser Leu Thr Ile Pro
                                        75
                    70
Glu Ser Gly Ala Trp Val Val Ser Phe Asp Leu Ala Asp Gly Glu Asn
                85
                                    90
Ser Tyr Glu His Val Glu Leu Asp Pro Arg Ala Leu Arg Asn Leu Val
            100
                                105
Asp Gly Val Ala Arg Ala Leu Tyr Asp His Tyr Asn Val Ser Lys Ala
                            120
Gly Leu Tyr Phe Trp Ile Ala Ala Arg Glu Glu Leu Val Ser Ile Tyr
                        135
Asp Lys Ala Leu Gly Leu Val Pro Glu Lys Thr Leu Lys Leu Lys Pro
                    150
                                        155
Leu Pro Leu Thr Glu Asn Leu Asn Gln Leu Gly Glu Asn Gly Arg Gly
                165
                                    170
Tyr Ala Ile Ile Thr Lys Tyr Tyr
            180
                                185
<210> 10753
<211> 202
<212> PRT
<213> Enterobacter cloacae
<400> 10753
Ala Arg Thr Gly Gly Val Met Pro Ser Ser Arg Asn Thr Thr Glu Asn
Pro Thr Ala Asp Gln Leu Tyr Glu Glu Val Thr Arg Lys Leu Lys Thr
Ala Ser Ser Asn Ile Ala Lys Arg Lys Leu Glu Ser Gly Glu Tyr Val
Met His Asn Gly Arg Ile Ile Pro Ala Ser Val Leu Glu Glu Ala Asn
Ala Glu Asn Ala Ile Ser Lys Arg Arg Ser His Gly Ala Ile Pro Leu
                                        75
Pro Ser Phe Thr Arg Lys Ser Glu Glu Ala Arg Pro Leu Val Pro Val
Trp Ile Gly Gly Asp Glu Gln Asp Asn Gly Glu Trp Lys Gly Ser Arg
            100
                                105
                                                    110
Lys Ser Ile Ala Ala Ala Ser Val Gln Thr Ser Leu Arg Pro Pro Met
                            120
                                                125
Arg Val Arg Ala Ala Ala His Phe Arg Gly Lys Thr Gln Thr Val Asp
                       135
                                            140
Val His Leu Asp His Ser Gly Ile Ala Pro Lys His Gly Gln Ile Phe
                    150
                                        155
Ala Tyr Asp Ala Lys Ser Gly Gln Phe Ile Pro Val Ile Ser Gly Ser
               165
                                    170
Gly Thr Met Ala Gln Asp Asn Arg Arg Ala Lys Asp Arg Lys His Ala
```

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Gly Leu Leu Ala Ala Arg Lys Ser Lys
<210> 10754
<211> 90
<212> PRT
<213> Enterobacter cloacae
<400> 10754
Arg Gln Gly Arg Ser Val Met Leu Asn Arg Asn Leu Glu Val Leu Thr
                                    10
Ser Tyr Phe Asn Asp Leu Leu Glu Ser Ala Pro Gln His Arg Asp Asn
            20
                                25
Val Val Ala Ile Leu Ala Gln Ile Glu Ile Met Lys Ser Arg Pro Val
                            40
Phe Ser Leu Glu Pro Ser Ile Leu Leu Ala Arg Lys Glu Ile Asp Lys
                        55
Cys Thr Ile Cys Lys Gln Val Leu Cys Asp Glu Trp Pro Glu Thr
                    70
                                        75
Leu Phe Cys Gly Leu Pro Val Ser Asp
                85
<210> 10755
<211> 70
<212> PRT
<213> Enterobacter cloacae
<400> 10755
Ala Arg Ala Cys Ser Leu Ser Thr Gly Gly Val Tyr Gly His Asn His
Asp Leu His Leu Asn Leu Arg Lys Lys Leu Leu Thr Ile Thr Asp Thr
            20
                                25
Gln Asn Arg Thr Asn Asp Leu Phe Asn Gln Val Arg Gln Glu Leu Ser
Leu Tyr Gly Ile Glu Phe Glu Asp Ile Thr Val Thr Gln His Leu Asn
Val Arg Ala Gly Gln
<210> 10756
<211> 275
<212> PRT
<213> Enterobacter cloacae
<400> 10756
Ser Arg Asp Leu Phe Ser His Trp Ser Pro Gln Ser Cys Trp Pro Val
                                    10
Lys Lys Ser Ile Ser Ala Gln Tyr Val Arg Ser Arg Cys Ser Val Met
                                25
Ser Gly Gln Lys Arg Tyr Phe Val Val Ser Arg Tyr Pro Thr Asp Ser
                            40
Glu Pro Lys Gly Ile Gly Phe Ser Pro Val Gly Asp Gly Lys Val Pro
                        55
Glu Glu Tyr Leu Thr Phe Arg Leu Asp Val Glu His Val Ile Gln Thr
                                        75
                    70
Ile Asn Ala Leu Phe Glu Asn Asp Lys Val Lys Arg Leu Glu Ala Tyr
                                    90
Glu Gln Val Phe Gln Ser Ala Gln Val Arg Phe Ser Gly Arg Glu Thr
                                105
Asp Phe Val Pro Ala Ser Gln Ala Leu Asn Glu Leu Lys Lys Thr Ile
                            120
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Leu Ser Ser Ser Trp Val Phe Val Arg Asn Arg Ile Met Gly Val Tyr
                        135
                                            140
Gly Leu Tyr Ala Leu Leu Leu Ile Ile Ile Leu Gly Met Thr Gln Tyr
                    150
                                        155
Phe Phe Thr Ala Glu Leu Lys Asn Val Pro Ala Val Leu Ile Gly Thr
                                    170
Cys Thr Gly Ser Trp Leu Phe Val Ser Ile Lys Thr Lys Asn Ile Val
                                185
Phe Asp Glu Ile Tyr Glu Asn Met Ser Gln His Arg Ser Leu Leu Met
                            200
Arg Leu Ile Tyr Cys Cys Thr Leu Ser Ser Ala Val Thr Ala Cys Leu
                        215
                                            220
Leu Ala Gly Phe Phe Glu Ile Lys Ile Gly Glu Val Ser Thr Ala Leu
                    230
                                        235
Ile Pro Asp Asn Ala Ile Ile Ala Leu Ala Ala Gly Ile Phe Phe Gly
                245
                                    250
Leu Gly Glu Ser Ser Leu Ala Thr Arg Leu Ser Gly Lys Val Lys Asn
            260
                                265
Ser Ile
        275
<210> 10757
<211> 121
<212> PRT
<213> Enterobacter cloacae
<400> 10757
Arg His Ser Pro Lys Thr Ile Pro Leu Asn Thr Phe Gln Lys Trp Phe
Asp Leu Leu Tyr Asn Ile Ile Tyr Met Leu Arg Lys Gln Asn Glu Phe
Ile Cys Ser Glu Cys Ile Asn Glu Lys Ile Gly Ser Arg Val Gly Trp
Val Ile Gly Gly Leu Asn Ile Tyr Gly Ile Val Gln Arg Ala Ala Asp
Ser Ala Asp Asn Leu Lys Asn Phe Cys Pro Ile Phe Tyr Asn Ala Leu
                    70
Tyr Arg Glu Gly Leu Glu Met Met Tyr Phe Leu Ile Glu Pro Met Ile
                                    90
                85
Met Lys Ser Cys Tyr Leu Asn Ile Ser Thr Ala Ser Asp Glu Glu Ile
            100
                                105
Val Arg Ala Leu Lys Arg Met Met
<210> 10758
<211> 169
<212> PRT
<213> Enterobacter cloacae
<400> 10758
Phe Thr Pro Gln Ile Lys Thr Met Asn Ser Phe Met Asp Thr Phe Lys
                                    10
Ser Glu Ile Asn Ile Thr Leu Leu Gly Lys Asp Met Phe Asp Asp Arg
                                25
Met Asn Ile Ala Arg Glu His Val Met Tyr Tyr Ser Glu Glu Ile Ile
Lys Gln Pro Gly Thr Asp Lys Glu Leu Ala Val Arg Leu Asp Lys Ala
Leu Ile Gly Val Lys Glu Gly Val Gln Tyr Tyr Val Asn Gly Leu Gly
Asp Ala Thr Thr Arg Leu Leu Tyr Tyr Thr Ser Cys Leu Thr Glu Asn
```

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90
Tyr Gln Asp Val Cys Lys Lys Leu Gly Ser Glu Asp Val Arg Phe Ile
                               105
Cys Ala Leu Tyr Glu Leu Val Lys His Arg Asn Val Ile Phe Arg Met
                            120
Leu Asn Ile Tyr Ile Glu Thr Leu Leu Lys Asn Lys Ser Asp Val Glu
                        135
                                            140
Lys Lys Thr Ile Leu Glu Asn Leu Thr Pro Phe Ala Lys Asn Tyr Pro
                    150
                                        155
Ile Lys Tyr Ile Ser Lys Met Val
                165
<210> 10759
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10759
Pro Ile Ser Pro Gly Glu Cys Asp Leu Ile Cys Lys Trp Gln Ile Ile
Ile Ala Asp Ile His Leu Asn Ala Phe Ser Pro Ala Ser Ser Leu Leu
            20
                                25
Ile Pro Gln Asn Tyr Lys Lys Phe Phe Gly His Leu Lys Ala Asp
                            40
Asn Gly Cys Leu Leu Ser Phe Gly His Pro Tyr Cys
   50
                        55
<210> 10760
<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 10760
Val Glu His Arg Thr Asp Gly Lys Gly Phe Gln Gly Met Gly Val Val
Thr Phe Tyr Leu Ala Asn Leu Val Gly Gln Phe Gly Glu Ala Asn Ser
Ala Arg Glu Arg Gly Glu Leu His Gln Val Lys Val Leu Ala Asn Asp
Gly Leu Pro Gly Val Ser Glu Ser Leu Trp Gln Lys Asn Val Ala Lys
Gln Thr Pro
65
<210> 10761
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 10761
Val Thr Ser Asn Glu Arg Ala Glu Glu Ser Val Pro Glu Cys Gln Pro
                                    10
Asn Glu Gly Glu Glu Lys Leu Tyr Val Val Phe Cys Ile Pro Ser Ala
                                25
Glu Thr Ile His Gln Gly Phe Gly Ala His Tyr Thr Leu Ile Tyr Ser
                            40
Lys Lys Glu Asn Gly Asn Ser Val Ser Lys Thr Ile Cys Ala Asp Ser
                       55
His Lys Phe Val Ile Lys Ala Leu Arg Pro Asn Val Ile Leu
```

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<210> 10762
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10762
Ala Arg Arg Val Met Thr Met Lys Lys Trp Ile Ser Thr Leu Arg Arg
                                    10
Phe Phe Ala Pro Arg Pro Val Asn Ala Glu Asn Ser Ala Gln Arg Val
                                25
Leu Glu Ser Ile Leu Pro Val Ala Ser Leu Tyr Gly Val Asp Val Ala
Asn Ile Asp Pro Glu Trp Phe His Asp Lys Thr Ser Arg
                        55
<210> 10763
<211> 440
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(440)
<400> 10763
Trp Pro Phe Cys Tyr His Tyr Leu Leu Ser Gln Met Glu Met Ile Met
                                    10
Lys Arg Thr Val Leu Thr Pro Ala Leu Ser Ala Thr Ala Leu Leu Leu
            20
                                25
Thr Met Gln Ala Ala His Ala Gly Pro Gln Ala His Val Val Cys Ser
        35
                            40
Tyr Ser His Thr Leu Gly Asp Asp Ala Ile Met Met Phe Ser Met Pro
                        55
Asn Glu Ala Met Leu His Asp Phe Phe Gly Asn Val His Thr Asp Ala
                    70
                                         75
Tyr Ser Ser Arg Glu Ser Leu Arg Thr Gln Glu Lys Thr Thr Cys Asp
                85
                                     90
Asn Lys Ala Asp Ser Ser Ala Tyr Trp Ala Pro Ser Leu Lys Leu Pro
            100
                                105
                                                     110
Asp Gly Thr Val Val Lys Pro Ala Tyr Gln Lys Thr Tyr Tyr Gln Ala
                            120
                                                 125
Ser Asn Val Asp Ala Trp Pro Leu His Pro Phe Gln Ala Gly Leu Ser
                        135
Leu Leu Ala Gly Asp His His Gly Thr Ala Pro Asn Pro His Ile Thr
                    150
                                         155
Phe Leu Cys Ala Asn Gly Lys Gly Tyr Thr Thr Arg Thr Gly Glu Val
                                     170
Cys Gly Leu Arg Lys Ala Lys Asp Ala Val Gln Phe Asn Ile Gly Ile
            180
                                185
Gln Phe Pro Asn Cys Trp Asp Gly Val Asn Leu Lys Pro Ala His Gly
                            200
        195
Leu Ala Asn Ala Thr Tyr Asp Thr Lys Gly Gln Cys Pro Ser Ala Phe
                        215
                                            220
Pro Val Lys Ile Pro Thr Val Asn Met Asn Ile Ala Tyr Val Leu Pro
                    230
                                         235
Thr Ile Ser Ser Leu Asp Thr Ser Lys Val Gln Leu Ser Leu Asp Pro
                245
                                    250
Ile Met His Gly Ser Glu Arg Glu Glu Arg Trp Gly Ser Leu Tyr Thr
            260
                                265
                                                     270
Ala His Ala Asp Phe Met Asn Gly Trp Thr Glu Asp Ala Ala Arg Phe
                            280
```

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Met Thr Asp Leu Cys Met Asn Arg Gly Met Asp Cys Gly Thr Thr Val
                        295
                                            300
Pro Tyr Gly Tyr Ser Lys Ala Lys Ala Asn Val Trp Leu Ser Ser Met
                    310
                                        315
Glu Pro Ala Leu Ser Gln Pro Asp Pro Gln Val Leu Leu Val Gln Asp
                325
                                    330
Asn Trp Lys Asn Gly Gly Arg Thr Lys Asn Ser Glu Thr Leu Ser Leu
                                345
Val Lys Phe His Ile Pro Pro Leu Pro Ala Gly Gln Asp Pro Ala Gln
                            360
Phe Lys Tyr Arg Val Arg Ile Phe Gly Gly Lys Val Glu Thr Asn Gly
                        375
Ala Asp Gln Ile Phe Phe Tyr Pro Ala Ser Asn Asp Trp Asp Pro Ala
                    390
                                        395
Thr Val Ser Trp His Ser Arg Pro Ser Cys Asn Tyr Arg Ser Asp Ala
                                    410
                405
Val Leu Tyr Leu Asn His Ser Arg Glu Tyr Arg Ser Ser Pro Gln Gly
            420
                                425
Pro Lys Asp Pro Arg Ile Gly Xaa
        435
<210> 10764
<211> 191
<212> PRT
<213> Enterobacter cloacae
<400> 10764
Thr Asp Ser Glu Ser Ala Asp Thr Ala Ser Leu Leu Ser Ile Gly Leu
                                    10
Thr His Thr Tyr Leu Thr Asn Ser Gln Leu Ile Gly Pro Pro Ser Lys
            20
Ala Gly Phe Phe Tyr Phe Arg Leu Lys Glu Thr Ser Ser Thr Arg Leu
Leu Val Lys Ser Ser Arg Gly Pro Asp Leu Ile Asn Gln His Gln Ala
                        55
Gly Ala Asn Met Lys Lys Thr Thr Met Gln Asp Arg Pro Asp Thr Trp
                    70
                                        75
Ala Val Met Leu Ala Trp Leu Val Asn His Lys Asn Glu Ala Gly Tyr
                                    90
Ser Val Leu Ala Phe Val Met Ser Ile Leu Ala Thr Ser Arg Gly Ala
                                105
Lys Ser Lys Trp Lys Asp Arg Ile Ala Gly Ala Thr Met Cys Gly Ile
                            120
Leu Cys Phe Phe Ala Gln Pro Thr Leu Thr Ala Ile Trp Ala Ile Phe
                        135
                                            140
Asn Trp Asn Phe Pro Pro Glu Leu Cys Trp Pro Ile Ser Ala Gly Val
                    150
                                        155
Gly Tyr Val Gly Val Asp Ser Leu Phe Ala Tyr Ala Arg Arg Arg Leu
                165
                                    170
Gly Leu Asn Glu Pro Gly Asp Lys Ala Asn Ala Asp Pro Gln
                                185
<210> 10765
<211> 158
<212> PRT
<213> Enterobacter cloacae
<400> 10765
Trp Arg Val Phe Phe Gln Glu Thr Ala Met Ser Ala Leu Tyr Glu
```

Lys Ser Gln Leu Thr Lys Ile Leu Ile Ser Ser Leu Pro Ala Thr Lys

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20
                                25
Glu Thr Met Asp Ser Ala Thr Phe Leu Asp Leu Ser Cys Thr Ile Lys
                            40
Glu Ile Gln Phe Thr Gly Gly Gln Lys Gln Asp Ile Asp Val Thr Thr
                        55
Leu Cys Ser Thr Glu Gln Glu Asn Ile Asn Gly Leu Pro Ser Pro Ser
                    70
                                        75
Glu Ile Ser Leu Ser Gly Asn Phe Tyr Lys Asn Pro Ala Gln Asp Ala
                                    90
Leu Arg Glu Ala Tyr Asp Asn Asp Thr Thr Tyr Ala Phe Gln Val Ile
                                105
Phe Pro Ser Gly Lys Gly Phe Lys Phe Leu Ala Glu Ile Arg Gln His
                            120
Thr Trp Ser Ser Gly Thr Asn Gly Val Val Ala Ala Thr Phe Ser Leu
                        135
Arg Leu Lys Gly Lys Pro Glu Asn Ile Glu Ser Gly Ser
                    150
<210> 10766
<211> 147
<212> PRT
<213> Enterobacter cloacae
<400> 10766
Gly Leu Lys Met Thr Ile Trp Leu Gly Ala Leu Lys Asn Leu Leu Ala
Pro Leu Thr Gly Lys Thr Leu Ser Cys Leu Lys Ser Gln Asn Asn Gly
            20
Leu Ser Arg Pro Ser Arg Thr Glu Cys Ser Arg Ala Arg Leu Ser Ala
                            40
Thr Trp Arg Gln Ile Ser Ala Leu Leu Leu Phe Leu Met Pro Leu
Leu Ser Gly Cys Ala Gln Gln Lys Pro Pro Val Glu Tyr Arg Val
Ile Lys His Pro Ala Leu Asn Leu Pro Ala Glu Leu Thr Ser Arg Leu
Asp Val Pro Asp Leu Pro Asp Asn Pro Ser Tyr Gly Asp Ser Val Ser
                                105
                                                    110
Met Asn Ala Thr Leu Tyr Gly Ile Val Gly Gln Cys Asn Ile Asp Arg
                            120
Glu Ala Ile Arg Lys Ile Glu Lys Gly Arg Asn Asp Glu Asn Gln Pro
                        135
   130
Val Gln
145
<210> 10767
<211> 234
<212> PRT
<213> Enterobacter cloacae
<400> 10767
Ser Gln Asp Ser Thr Arg Thr Pro Glu Gln Lys Leu Ser Asn Glu Val
Lys Met Thr Glu Ser Lys Tyr Gly Ser Gly Leu Pro His Ala His Ala
Ala Cys Ile Val Asp Gly Cys Glu Leu Ser Val Arg Ser Arg Asn Ser
His Tyr Cys Glu Lys His Tyr Met Arg Val Arg Arg His Gly Thr Thr
Glu Lys Leu Ser Thr Arg Lys Asp Gly Lys Leu Glu His Thr Gly Gly
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Tyr Leu Leu Val Tyr Ala Pro Asp His Pro Leu Ala Cys Gly Ser Pro
                                    90
                85
Arg Val Tyr Glu His Arg Lys Val Tyr Tyr Asp Lys His Gly Ala Gly
                                105
Pro Phe Arg Cys His Trp Cys Ala Lys Thr Val Gly Trp Asp Thr Leu
                            120
His Ile Asp His Leu Asp Asp Cys Lys Thr Asn Asn Glu Pro Asp Asn
                        135
                                            140
Leu Val Pro Ser Cys Pro Val Cys Asn Gln Lys Arg Gly Val Asp Lys
                    150
                                        155
Met Arg Lys Thr Met Arg Glu Asn Ser Asp Arg Arg Tyr Thr Ala His
                                    170
                165
Gly Lys Thr Met Cys Leu Asn Glu Trp Ala Asp Tyr Leu Gly Ile Ser
            180
                                185
                                                     190
Arg Asn Ser Ile Glu Tyr Arg Leu Lys Ala Gly Trp Asp Ile Ser Met
        195
                            200
                                                 205
Val Phe Ser Pro Arg Ile Gly Asn Ser Gly Pro Pro Ser Arg Lys Leu
                        215
                                            220
Ala Lys Ile Val His Glu Ser Val Lys
                    230
<210> 10768
<211> 155
<212> PRT
<213> Enterobacter cloacae
<400> 10768
Ala Gly Asp Arg Lys Met Ile Glu Thr Ser Leu Asp Phe Ser Gly Leu
                                    10
Asn Asp Ile Ala Lys Asp Leu Glu Ala Leu Ser Arg Ala Glu Asn Asn
Lys Val Leu Arg Asp Ala Thr Arg Ala Gly Ala Glu Val Leu Lys Asp
                            40
Glu Val Ile Ala Arg Ala Pro Val Arg Thr Gly Lys Leu Lys Lys Asn
Val Val Val Thr Gln Lys Ser Arg Arg Arg Gly Glu Ile Ser Ser
Gly Val His Ile Arg Gly Val Asn Leu Arg Thr Gly Asn Ser Asp Asn
Thr Met Lys Ala Asn Asn Pro Arg Asn Ala Phe Tyr Trp Arg Phe Val
            100
                                105
Glu Leu Gly Thr Ala Asn Met Pro Ala His Pro Phe Val Arg Pro Ala
        115
                            120
Tyr Asp Thr Arg Glu Glu Glu Ala Ala Ser Val Ala Ile Ala Arg Met
                        135
                                         . 140
Asn Gln Ala Ile Asp Glu Val Leu Ser Lys
                    150
                                        155
<210> 10769
<211> 96
<212> PRT
<213> Enterobacter cloacae
<400> 10769
Lys His Arg Val Trp Leu Leu Arg Gly Arg Met Lys Asn Ile Lys Asn
                                    10
Leu Ala Leu Ala Lys Met Ser Gly Phe Arg His Lys Thr Val Ala Val
                                25
Pro Glu Trp Glu Gly Val Lys Val Val Leu Arg Glu Pro Ser Gly Glu
```

Ala Trp Leu Arg Trp Gln Glu Val Val Lys Ala Gly Ala Asp Asp Glu

```
55
                                             60
Asn Val Ser Val Ser Glu Lys Ala His Arg Asn Leu Cys Ala Asp Val
                   70
                                        75
Cys Ser Ser Leu Thr Phe Asp His Gly Gly Trp Ile Asp Pro Arg Ser
<210> 10770
<211> 77
<212> PRT
<213> Enterobacter cloacae
<400> 10770
Val Glu Lys Gly Asn Cys Arg Glu Val Phe Gln Arg Gly Ile Ala Leu
Phe His Gln Cys Pro Glu Asn Pro Phe Thr Phe Gln Leu Asn Glu Phe
            20
                                25
Ile Tyr Asp Cys Val Leu Leu Ile Arg Asn Asn Asn Asp Lys Gly His
                            40
Leu Arg Val Ala Leu Phe Asn Gly Val Asn Gln Arg Glu Gly Ser Gly
                        55
Thr Asn Gly Ala Thr Glu Ile Ile Ser Val Val Thr
                    70
<210> 10771
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10771
Thr Phe Asn Gly Gly Ile Phe Arg Ala Val Thr Asp Asp Asn Arg Met
                                    10
Ala Lys Val Glu Lys Val Met Gly Glu Ala Asp Ala Thr Ala Cys Ala
            20
Ser Asp Gln Tyr Trp Ala Leu Leu Arg Val Ser His Arg Asn Leu Leu
Phe Ser Ser Thr Met Gly Gln Ala Thr Leu Ser His
<210> 10772
<211> 63
<212> PRT
<213> Enterobacter cloacae
<400> 10772
Leu Leu Gln Val Asn Leu Met Leu Met Ser Cys Ser Ile Met Ala Leu
Tyr His Val Phe Thr Ala Ser Leu Ala Arg Phe Ile Gly Pro Glu Gly
Glu Phe Lys Val Asn Ile Ser Val Ser Asn Pro Asp Arg Leu Phe Phe
                            40
                                                45
Thr Asp Lys Val Ile Phe Thr Thr Arg Ser Thr Val Asn Glu Arg
                        55
<210> 10773
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 10773
Gly Ile His Ile His Ser Ile Gln Lys Val Leu Ile Lys Gly Asn Asp
```

<210> 10774 <211> 66 <212> PRT

<213> Enterobacter cloacae

<400> 10774

 Pro
 Val
 Leu
 Tyr
 Val
 Met
 Gln
 Ser
 Pro
 Phe
 Thr
 Asp
 Arg
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<210> 10775 <211> 175

<212> PRT

65

<213> Enterobacter cloacae

<400> 10775

Asn Leu Gln Asp Ala Leu Met Lys Arg Ile Phe Leu Ser Val Ala Met Leu Leu Val Gly Cys Ser Ser Ala Ala Ser Gln Glu Gln Ser Ala Lys 20 Asp Thr Thr Val Ser Phe Tyr Lys Ser Tyr Leu Cys Ala Phe Gly Ser 40 Asn Glu Ala Arg Pro Tyr Pro Ala Asp Glu Leu Arg Lys Tyr Val Ser Ala Asp Thr Ile Ala Arg Ile Gly Ala Ile Gln Glu Ile Pro Glu Gln 75 Glu Leu Ile Glu Ser Asp Tyr Phe Thr Tyr Thr Gln Asp Tyr Ala Arg 90 Glu Trp Ile Pro Ala Leu Arg Val Glu Asn Ala Arg Pro Phe Leu Asn 100 105 110 Gly Glu Val Val Gln Val Met Glu Gly Ala Gly Gly Gly Arg Ser Ile 120 125 His Leu Glu Val Phe Leu Arg Arg Glu Asp Asp Ala Trp Lys Ile Tyr 135 140 Arg Val Arg Asp Leu Thr Asn Asn His Glu His Pro Ile Phe Asn Ala 150 155 Gly Ala Ile Ala Gln Ala Lys Ile Ala Ala Glu Ser Gly Leu

170

<210> 10776

<211> 147

<212> PRT

<213> Enterobacter cloacae

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<400> 10776
Ala Leu Phe Asn Gln His Gln Val Asn Asp Trp His Asn Asn Ser Val
                5
                                     10
Leu Thr Tyr Leu Arg Glu Leu Arg Met Ser Trp Asn Lys Asp Val Ala
                                 25
Val Ser Tyr Leu Arg Ser His Ala Leu Gly His Ser His Ser Glu Cys
Ala Lys Phe Thr Arg Leu Ala Ile Leu Ala Gly Gly Val Lys Val Pro
                        55
Asn Thr Asp Tyr Ala Lys Asp Tyr Gly Ala Glu Leu Leu Arg Ala Gly
                    70
                                         75
Phe Arg Glu Leu Pro Pro Gly Ser Thr Leu Ile Ala Gly Asp Val Ala
                                     90
                85
Val Ile Gln Pro Tyr Pro Gly Gly Asn Gly Ile Gly His Met Thr Met
            100
                                 105
Tyr Asp Gly Thr Gln Trp Ile Ser Asp Phe Val Gln Lys Ser Met Tyr
                            120
                                                 125
Pro Gly Pro Gly Tyr Arg Lys Met Gln Pro Ser Phe Lys Ile Tyr Arg
    130
                        135
Met His
145
<210> 10777
<211> 64
<212> PRT
<213> Enterobacter cloacae
<400> 10777
Lys Arg Gly Arg Ala Thr Gly Trp Tyr Tyr Ala Thr His Pro Ala Leu
                                     10
Lys Thr Gly Trp Met Arg Phe Ala Pro Val Cys Ser Val Glu Ala Asp
            20
Val Val Phe His His Pro Phe Glu Glu Ala His Thr Gly Thr His Glu
                            40
                                                 45
Ala Val Phe Lys Pro Lys Thr Cys Met Phe Ile His Thr Asn Thr
<210> 10778
<211> 70
<212> PRT
<213> Enterobacter cloacae
<400> 10778
Gly Leu Lys Phe Ser Gly Asp Pro Ser Glu Gln Tyr Thr Ser Val Phe
                                     10
Ala Ala Thr Val Glu Leu Thr Val Ser Ala Ala Ser Ala Ser Val Ile
            20
                                25
Ile Val Asn Val Leu Phe Ile Ile Tyr Ser Cys Leu Phe Asn Ser Thr
                            40
                                                 45
Ala Asn Tyr Phe Phe Cys His Phe Ile Asn Asn Ile Lys Val Met Ala
Gln Thr His Glu Lys
<210> 10779
<211> 174
<212> PRT
<213> Enterobacter cloacae
<400> 10779
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```
Gly Cys Ser His Tyr Val Cys Leu Cys Leu Arg Leu Phe Tyr Gly Ala
                                    10
Lys Leu Asp Leu His Lys Met Cys Gln Lys Ser Ser Ile Phe Thr Arg
                                25
Gln Asn Ser Asn Ile Ala Ser Lys Glu Gly Phe Met Glu Trp Lys Val
Val Glu Thr Ile Ala Ser Pro Glu Ser Gly Thr Ile Phe Cys Lys Val
Glu Thr Gln Tyr Gly Leu Asn Tyr Ile Leu Trp Leu Lys Gly Asp Tyr
                                        75
Tyr Val Arg Thr Gly Glu Ile Ile Thr Thr Ser Asn Gln Gly Ile Leu
                85
Ile Asn Asp Arg Arg Arg Val Trp Ile Ala Gln Ala Met Pro Phe
            100
                                105
Thr Ser Ile Gly Trp Met Gly Phe Lys Gln Lys Asn Ala Cys Pro Gly
                            120
Asn Arg Gln Glu Met Asp Arg Pro Cys Thr Ala Glu Thr Pro Cys Gln
                        135
                                            140
Phe Lys Leu Cys Pro Phe Gly Leu Lys Arg Tyr Ile Pro Glu Ser Tyr
                    150
                                        155
Ser Thr Thr Lys Ile Asn Asn His Pro Asp Gly Arg Leu
                165
                                    170
<210> 10780
<211> 61
<212> PRT ·
<213> Enterobacter cloacae
<400> 10780
Ile Val Glu Gln Ile Thr Gln Val Phe Ser Thr Thr Leu Leu Thr Leu
                                    10
Leu Pro Val Phe Leu Ala His Phe Leu Val Gly Phe Phe Cys Leu
Asn Pro Pro Lys Ser Gly Val Phe Ser Val Glu Val Lys Arg Tyr Ser
Leu Leu Leu Asn Asn Gln Lys Ala Leu Ile Thr
<210> 10781
<211> 281
<212> PRT
<213> Enterobacter cloacae
<400> 10781
Arg Gly Gly Phe Leu Met Ala Asn Ser Phe Lys Gln Met Thr Arg Asp
                                    10
Gly Thr Ile Lys Arg Thr Asp Thr Gly Met Phe Ile Ser Leu Asp Gln
                                25
Ile His Val Arg Glu Gly Phe Asn Lys Arg Glu Asp Asp Glu Arg Thr
                            40
                                                45
Arg Gln Ala Asp Asp Asp Leu Phe Asn Tyr Leu Met Asn Gly Gly Ser
                        55
Val Pro Pro Leu Glu Val Ile Ala Arg Asp Glu Gly Val Trp Val
                    70
                                        75
Val Glu Gly His Arg Arg Arg Cys Tyr Ala Arg Cys Ala Glu Ala
                                    90
Gly Lys Pro Val Asp Arg Ile His Ile Met Pro Phe Asn Gly Asn Asp
                                105
Val Gln Arg Leu Ala Arg Ile Met Thr Ser Asn Asn Gln Leu Pro Leu
                            120
```

Ser Asp Met Glu Gln Ala Ala Val Ile Gln Glu Leu His Asn Ala Phe

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5958
                        135
                                            140
Asn Gln Thr Thr Ser Glu Ile Ala Lys Leu Val Asn Lys Ser Val Pro
                   150
                                       155
Thr Val Glu Lys Leu Leu Leu Ser Thr Ala Asn His Asp Val Gln
                                    170
Lys Glu Val Lys Ser Gly Thr Val Ser Val Asp Val Ala Val Asp Arg
                                185
Val Lys Glu Phe Gly Glu Lys Ala Gly Glu Val Leu Gln Lys Asp Lys
                            200
Ala Ser Ala Ala Lys Gly Lys Lys Val Thr Arg Ser Val Ile
                        215
Ala Pro Glu Ile Ser Val Lys Lys Ala Arg Arg Leu Val Glu Leu Ile
                    230
                                        235
Ser Leu Ala Gly Ile Ser Asp Thr Gly Val Ile Tyr Leu Glu Gly Leu
                245
                                    250
Val His Ala Glu Val Val Glu Ile Ile Asp Glu His Lys Ala Ile Ala
            260
                                265
Val Gln Arg His Gly Glu Ala Ser
        275
<210> 10782
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 10782
Ser Ala Arg Ser Pro Leu Val Asn Leu Pro Leu Glu Glu Ala Ser Asp
Ile Ile Arg Glu Ser Leu Arg Thr Glu Val Arg His Glu Leu Glu Tyr
            20
                                25
Glu Tyr Asp Asp Arg Ile Ser Ser Ala Glu Glu Glu Ala Ser Asp Trp
                            40
Glu Ser Arg Ala Asp Ser Tyr Glu Cys Asp Ala Ile Ser Phe Ala Arg
                        55
Ala Ile Glu Lys Ala Leu Leu Ala Pro Thr Leu Asp Glu Ala Lys Ile
                    70
Ile Leu Glu Arg Val Arg Ser Asp Asn Arg Glu Tyr Phe
<210> 10783
<211> 154
<212> PRT
<213> Enterobacter cloacae
<400> 10783
Tyr Leu Met Asn Ile Tyr Glu Phe Gly Ser Ile Gln Val Pro Gly Phe
                                    10
Val Gln Pro Lys Phe Ser Ala Val Gln Ser Ala His Asn Thr Glu Lys
            20
                                25
Leu Ser Met Thr Asn Thr Gln Asn Val Thr Glu Leu Gln Pro Arg Met
```

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His Leu Leu Glu Ala Gln Arg Glu Leu Arg Glu Leu Ser Pro Ile Val
                        135
Ile Ser Gln Asn Asn Glu Val Ala Phe
                    150
<210> 10784
<211> 113
<212> PRT
<213> Enterobacter cloacae
<400> 10784
Pro Val Ser Gly Ser Thr Phe Ala Arg Arg Ser Met Phe Gln Leu Lys
Pro Gly Ser Met Ala Met Ile Val Gly Ala Arg Thr Ala Ala Gly Arg
            20
                                25
Arg Asn Ile Gly Lys Ser Val Glu Leu Phe Gly Leu Cys Gln Pro Gly
                            40
                                                 45
Gln Arg Phe Val Asn Pro Val Asn Gly Val Met Thr Gln Leu Pro Asp
                        55
Thr Ser Ala Arg Ala Leu Trp Leu Val Thr Gly Asp Val Tyr Ala Phe
                    70
                                        75
Asp Asn Gln His Gly Phe Ala Phe Val Arg Pro Glu His Leu Met Pro
                85
                                    90
Leu Thr Pro Asp Glu Met Pro His Asn Val Asp Glu Leu Ala Ile Gly
            100
                                105
<210> 10785
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 10785
Val Phe Ser Pro Tyr Ala Ile Pro Gly His Gly Tyr Glu Leu Ala Asp
Ser Glu His His Arg Arg Asp Asn Tyr Asn Phe Asp Trp Arg His Tyr
Ser Ser Ser Arg Pro Arg Tyr Glu Arg Glu Leu Ile Ala Phe Gly
                            40
Leu Lys Ser Ser Pro Glu Ile Asn Ser Phe Asn Leu Ser Lys Ser Ala
Cys Asp Phe Met Arg Lys Val Ser
<210> 10786
<211> 66
<212> PRT
<213> Enterobacter cloacae
<400> 10786
Ile Leu Leu Lys Ala Asp Glu Gly Glu Ala Lys Lys Ser Pro Asp Val
Glu Ile Gly Ala Lys His Leu Asp Tyr Gly Met Met Phe Ser Gly Gln
                                25
Cys Glu Asn Arg Tyr His Tyr Lys Arg Glu Ser Cys Arg Phe Asn Gly
                            40
Glu Ile Met Glu Lys Thr Ala Met Thr Arg Tyr Ser Asp Val Phe Thr
Pro
```

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<210> 10787
<211> 94
<212> PRT
<213> Enterobacter cloacae
<400> 10787
Asn Asn Tyr Trp His Arg His Ala Asp Asp Gln Pro Ala Glu Phe Gly
Tyr Phe Val Gly Leu Leu His Asp Ser Gly Val Gln Val Arg Gly Phe
Thr Phe Pro Pro Gly Asn Val Gly Phe Lys Ala Ala Gln Ala Pro Leu
Phe Lys Phe Ser His His Met Pro Tyr Pro Val Met Asp Met Ser Trp
                        55
Gln Ile Ala Asn Ile Thr Ala Val Ile Thr Thr Thr Leu Thr Gly Gly
                    70
Ile Ile Arg Pro Pro Leu Asp Gln Gly Met Lys Glu Ser
<210> 10788
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10788
Trp Val Val Val Pro Val Thr Ser Ser Asp Ile Thr Ile Ser Pro Val
Ile Cys Gln Tyr Val Ala Cys Tyr Ile Ser Thr Gly Arg Arg Gly Leu
Lys Glu Asn Ser Gln Arg Glu Arg Trp Leu Leu Gly His Ala Leu Leu
Val Asp Asp Cys Phe Trp Ser Asn Ser Leu Lys Phe Asn
    50
                        55
<210> 10789
<211> 70
<212> PRT
<213> Enterobacter cloacae
<400> 10789
Pro Ser Ser Ser Arg Leu Arg Arg Ser Ala Ala Ile Ser Trp Ser
                                    10
Ser Ser Thr Ser Arg Ile Cys Phe Met Gly Lys Pro Ser Ile Ile Cys
                                25
Tyr Val Val Ser Leu Pro Asp Phe Glu Arg Gly Lys Ser Ser His Phe
                            40
Val Glu His Cys Val Gly Phe Met Pro Gly Gly Phe Ala Leu Pro
Gly Leu Arg Phe Gly
65
<210> 10790
<211> 133
<212> PRT
<213> Enterobacter cloacae
<400> 10790
Ala Cys Ile Met Ser Ser Lys Asn Gln Ser Gln Tyr Phe Ser Ile Ala
Val Tyr Ile Pro Glu Glu Leu Lys Gln Thr Phe Val Glu Glu Cys Ser
```

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20
                                25
Ile Val Gly Ile Asp Ala Lys Arg Val Gln Cys Phe Ser Ser Asn Pro
                            40
Gly Ile Arg Glu Tyr Leu Ser Ile Leu Val Glu Arg Gly Gln Lys Phe
                        55
Ala Pro Tyr Leu Leu Lys Val Leu Asn Leu Gln Ser Lys Ser Lys
                    70
                                        75
Ile Arg Ile Glu Val Ala Ala Asp Arg Lys Ile Ile Asp Leu Gln Gly
                                    90
Val Ser Val Asp Asp Ala Leu Lys Leu Ile Gln Ala Ala Asp Ala Ile
                                105
Arg Val Ile Asp Gln Glu Pro Glu Asp Met Asn Ser Asp Ser Ala
                            120
Lys His Thr Ile
   130
<210> 10791
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 10791
Asn Asp Asn Lys Asn Arg Gly Asn Val Met Asn Asp Lys Lys Ile Gln
Ile Val Glu Leu Leu Ile Ser His Ser Gln Met Leu Leu Arg Ser Arg
            20
Asp Tyr Asp Glu Lys Leu Asn Tyr Trp Gly Lys Gly Asn Val Ser Gln
                            40
Gly Ala Val Leu His Lys Asp Tyr Val Ile Phe Asp Pro Leu Pro Glu
                        55
Asp Ala Phe Gly Ala Asn Val Asn Ile Lys Ile Asp Asn Ser Phe Ile
                                        75
Leu Asp Glu Thr Ala Gln Arg Cys Ile Val Val Pro Phe Phe Ile Thr
                                    90
Asn Lys Asn Lys Leu Gln Val Ala
            100
                                105
<210> 10792
<211> 229
<212> PRT
<213> Enterobacter cloacae
<400> 10792
Thr Leu Gln Lys Glu Ser Ser Met Asn Gln Phe Thr Glu Asp Leu His
Asn Val Val Ala Gln Ile Leu Ala Gly Ala Glu Ile Ser Asp Ser Glu
                                25
Ile Phe Lys Glu Leu Thr Ile Glu Pro Asp Phe Tyr Lys Val Gln Asp
Gln Tyr Tyr Gly Gly Asn Gly Ile Tyr Phe Asn Ser Glu Ser Glu Thr
Arg Phe Ser Leu Arg Ser Lys Ser Lys Gly Val Leu Tyr Leu Ala Thr
                    70
                                        75
Thr Ala Phe Thr Gly Leu Lys Glu Phe Tyr Gln Asp Ala Pro Leu Val
                                    90
Glu Thr Glu Asp Leu Glu Lys Asn Cys Met Ala Val Ile Gln Ala Ala
                                105
Arg Thr Ile Lys Ile Ile Asp Leu Ala Ala Leu Ala Pro His Leu Lys
                            120
                                                125
Thr Pro Leu Gly Tyr Leu Met Gly Ser Lys Ala Val Tyr Glu Asp Thr
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Gln Trp Leu Ala Glu Val Leu Ser His Tyr Ala Asp Gly Ile Glu Tyr
                    150
                                        155
Leu Ser Arg His Thr Gly Lys Thr Cys Ile Ala Leu Trp Ser Asp Thr
               165
                                    170
Val Asp Gly Asn Gly Met Leu Lys Asn Ile Ser Val Thr Pro Leu Ile
            180
                                185
Gln Phe Ser Leu Asn Gly Gln Ser Thr Gln Ala Ile Leu Lys Ser Lys
                            200
                                                 205
Leu Gly Ile Leu Thr Val Phe Thr Thr Gly Gly Arg Ala Asn Arg Ala
                        215
Lys Gln Gly Gly Glu
225
<210> 10793
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10793
Thr Pro Ile Glu Ala Ile Lys Gly Thr Glu Ile Tyr Pro Gly Gly Leu
                                     10
Tyr Ala Leu Val Phe Arg Ala Gln Gly Phe Tyr Met Asp Asp Phe Pro
            20
                                25
                                                     30
Ser Leu Ser Gly Arg Asn Ser Ala Pro Gly Phe Met Pro Val Asn Arg
                            4 O
Asp Leu Val Ser Arg Cys Ser Tyr Phe Pro Ser Phe Glu
<210> 10794
<211> 102
<212> PRT
<213> Enterobacter cloacae
<400> 10794
Gly Pro Lys Met Lys Arg Thr Leu Cys Thr Val Leu Thr Ala Leu Thr
Leu Ala Thr Ala Leu Pro Ala Ile Gly Ala Thr Thr Glu Ala Gly Ser
            20
                                25
Thr Ser Ala Ala Thr Thr Gly Thr Thr Thr Gly Ala Thr Val Gly Thr
                            40
Thr Ala Gly Thr Thr Gly Gly Leu Ala Ala Gly Ala Ile Gly Thr Thr
                        55
Ala Val Val Thr Thr Ala Ala Ile Ala Gly Val Ala Thr Leu Ala Val
                    70
                                         75
Val Ala Ala Ser Asp Ser Gly Asp Asp Ser Ser Asn Gly Thr Ser Thr
                                     90
Thr Thr Val Thr Arq
            100
<210> 10795
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10795
Cys Ser Ala Lys Lys Ile Ala Pro His Phe Ser Leu Leu Pro Gly Gln
                                    10
Thr Glu Thr Ser Ile Leu Ala Ser Ile Ser Arg His Asp Gly Glu Arg
            20
                                25
Met Gln Asn Tyr Tyr Gly Ser Leu Thr Phe Ile Ser Arg Lys Asn Phe
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Pro Pro Gln Gln Cys Ala Gly Lys Arg Pro Leu Arg Ala
                        55
<210> 10796
<211> 85
<212> PRT
<213> Enterobacter cloacae
<400> 10796
Trp Asn Leu Cys Lys Ala Cys Glu Gly Ser Ala Asp Phe Ala Ile Pro
Arg Ala Ile Lys Thr Val Gly Arg Gly His Gly Cys Arg Leu Tyr Arg
                                25
            20
Ser Leu Arg Arg Cys Leu Ala Ile Ala Asp Leu Gly Gly Arg His Asn
                            40
Val Ala Pro Leu Tyr Ile Met Ser Tyr His Ser Phe Leu Phe Lys Lys
Ala Ala Ile Ala Glu Trp Phe Asp Phe Ala Ile Val Lys Ser Ala Phe
                    70
Pro His Ala Ser
<210> 10797
<211> 113
<212> PRT
<213> Enterobacter cloacae
<400> 10797
Lys Ala Lys Phe Lys Ala Asp Lys Ala Ser Asn Ser Asn Lys Glu Glu
                                    10
Arg Glu Thr Phe Phe Arg Phe Phe Tyr Ser Pro Ala Leu Lys Ala Ala
            20
                                25
                                                    30
Ser Asp Phe Leu Asn Thr Val Leu His Lys Glu Asn Arg Met Thr Val
Phe Leu Ile Leu Thr Ala Ile Ala Tyr Gly Ile Phe Lys Ala Gly Cys
Phe Ile Leu Leu Val Val Lys Gly Tyr Gln Gly Trp Thr Leu Phe Trp
                    70
                                        75
Lys Asn Tyr Asp Arg Leu Pro His Ile Ile Arg Ser Arg Cys Arg Tyr
                85
                                    90
Gln Arg Arg Phe Ile Phe Arg Arg Ile Trp Lys Arg Ile Phe Ser His
            100
                                105
<210> 10798
<211> 108
<212> PRT
<213> Enterobacter cloacae
<400> 10798
Leu Phe Leu Asp Ile Ile Asn Leu Val Met Asp Arg Gln Ile Gln Arg
                                    10
Glu His Ile Glu Gln Gln Ile Asp Met Ser Leu Gly Asp Gly Ile Lys
                                25
Ala Ala Phe Arg Arg Ser Ile Met Thr Thr Ser Asn Ala His Phe Cys
                            40
Arg Lys Thr Gly Ser Leu Met Phe Gln His Arg Ile Lys Ile Tyr Thr
                        55
                                            60
Thr Ser Phe His Leu Thr Lys Tyr Ile His Gly Arg Arg Phe Glu Thr
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Arg Ile Ile Leu Val Tyr Lys Leu Leu Ile Gly Tyr Ala Gly Ile Phe 85 90 95

Lys Ser Leu Ile Pro Asp Gly Val Gln Tyr Leu 100 105

<210> 10799

<211> 94

<212> PRT

<213> Enterobacter cloacae

<400> 10799

Val Ser Phe Arg Val Phe Asn His Asn Pro Ser Ser Thr Ala Arg Lys 1 5 10 15

Leu Ala Arg Pro Met Val Ile Ala Gly Lys Ile Met Trp Lys Glu Thr 20 25 30

Val Asn Ala Asn Cys Thr Leu Ala Lys Trp Lys Ala Ser Asn Pro Asn 35 40 45

Ile Val His Leu Asn Pro Asp Asn Thr Leu Ile Ile Asn Tyr Phe Leu 50 55 60

Ser Asn Gln Ser Leu Asp Glu Lys Phe Arg Leu Leu Lys Thr Ile Ile 65 70 75 80

Phe Leu Tyr Glu Ile Lys Thr His Leu Gln Val His Cys
85 90

<210> 10800

<211> 190

<212> PRT

<213> Enterobacter cloacae

<400> 10800

Ala Met Thr Gln Ala Arg Arg Pro Ser Pro Leu Gln Arg Arg Val Leu

1 10 15

1 10 15

Ile Val Leu Ala Ala Leu Asp Ser Lys Arg Pro Gly Pro Val Ala Thr 20 25 30

Arg Asp Ile Glu Arg Val Leu Glu Gln Gly Gly Asp Ala Pro Val Tyr 35 40 45

Gly Pro Asn Leu Arg Ala Ser Cys Arg Arg Met Glu Ala Ala Gly Trp 50 55 60

Leu Arg Thr Leu Arg Ala Pro Asn Gln Gln Leu Ala Val Glu Leu Thr 65 70 75 80 Gly Ala Gly Arg Asp Val Ala Glu Pro Leu Tyr Gln Ala Ala Arg Asp

85 90 95 Asp Glu Ile Ser Arg Gln Arg Gln Leu Lys Val His Ser Leu Pro Leu

Asp Glu Ile Ser Arg Gln Arg Gln Leu Lys Val His Ser Leu Pro Leu 100 105 110

Arg Glu Ser Thr Thr Gly Glu Ala Val Glu Val Phe Leu Gly Asp Ser 115 120 125

Leu His Arg Ile Cys Gln Ala Ala Tyr Val Ile Arg Leu Asp Gly Ser 130 135 140

Thr Cys Leu Gln Val Thr Asn Ala Gly Gly Ile Arg Gln Ile Met Glu 145 150 155 160

Gly Asp Pro Leu Gln Val Ala Asp Leu Tyr Gln Thr Cys Tyr Asp Ala 165 170 175

Gly Leu Pro Val His Ile Gln Ile Asn Glu Ser Gln Asp 180 185 190

<210> 10801

<211> 102

<212> PRT

<213> Enterobacter cloacae

Cys Ala Cys Lys Gly Asp Phe Ile Pro Asp Leu Gly Leu Leu Thr Asn 10 Asn His Lys Leu Phe Arg Arg Gln Thr Val Asn Lys Asn Pro Ile Leu 25 Tyr Thr Gly Asp Gly Gly Val Leu Lys Thr Phe Pro His Gly Arg Gly 40 Gln Met Lys Gly Asp Ala Cys Val Ile Val Leu Arg Thr Arg Asp Gly 55 Glu Ile Phe His Gln Tyr Phe Ala Ile Ala Val Leu Val Gly Pro Leu 70 75 Leu Pro Leu Tyr Phe Gly Gln Arg Val Met Ser Gly Gly Leu Arg Asp Val Ser Tyr Leu Phe 100

<210> 10802

<211> 99

<212> PRT

<213> Enterobacter cloacae

<400> 10802

Leu Asn Arg Thr Leu Ser Asp Gly Ala Cys Arg Met Asp Glu Lys Glu 10 Val Asn Phe Ser Leu Ser Tyr Glu Gln Leu Thr Arg Ile Ala Glu Glu Arg Ile Arg Glu Cys Glu Leu Asp Ser Gln Gly Ala Lys Tyr Ile Ser 40 Glu Ser Ser Met Ala Ser Thr Leu Leu Gln Phe Trp Tyr Glu Leu Ala 55 Ile Thr Gly Ala Pro Met Lys Asn Tyr Glu Gln Thr Lys Ala Leu Ile 75 Asp Val Asp His Gln Arg Leu Arg Lys Leu Ile Trp Pro Glu Thr Asp 90

Lys Gln

<210> 10803

<211> 139 <212> PRT

<213> Enterobacter cloacae

<400> 10803

Val Pro Met Lys Lys Thr Lys Tyr Arg Phe Glu Ser Asp Asp Pro Phe Val Ser Lys Asp Val Leu Thr Leu Ile Asp Asn Gly Leu Val Phe Leu Asp Lys Ala Arg Glu Glu Leu Gln Asp Ser Met Pro Lys Phe Ser Ile Val Ser Phe Trp Thr Ala Val Glu Ile Leu Leu Lys Val Pro Leu 55 Leu His Glu His Trp Ser Leu Val Cys Ser Gly Arg Lys Ile Glu Arg 70 75 Ala Arg Tyr Leu Ala Gly Asp Phe Gln Ser Val Thr Tyr Asp Glu Thr 90 85 Cys Gln Arg Leu Ala Asp Val Leu Glu His Pro Leu Pro Lys Glu Thr 110 100 105 Ile Asp Val Phe Lys Lys Val Lys Asp His Arg Asn Arg Val Val His 120

Phe Tyr His Ser Asp Trp His Cys Cys Lys 130 135

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<210> 10804
<211> 194
<212> PRT
<213> Enterobacter cloacae
<400> 10804
Asn Val Arg Pro Leu Asn Lys Thr Lys Gly Cys Leu Ile Ala Asn Phe
Ala Thr Val Pro Asp Ile Asp Pro Lys Gln Thr Pro Asp Asp Ala Ala
                                25
Tyr Ala Trp Ser Asn Ile Val Asp Asp Ala Arg Ser Asn Gln Ala Val
Pro Ala Leu Ser Leu Tyr Ser Gly Asn His Trp Ser Thr Ala Lys Glu
                        55
Ile Leu Asn Ser Thr Arg Asn Leu Glu Leu Trp Ile Ile Ser Ala Gly
                    70
                                         75
Met Gly Phe Leu Asn Cys Arg Asp Arg Val Pro Ser Tyr Glu Ala Thr
                                     90
Phe His Gln Val Pro Phe Arg His Asp Leu Trp Trp Lys Ala Ile Thr
            100
                                105
                                                     110
Lys Ser Leu Gly Lys His Asn Arg Cys Ala Thr Ile Ser Gln Leu Met
                            120
Gln Ser Ser Pro Asn Asp Glu Tyr Leu Ile Ala Ala Ser Pro Val Tyr
                        135
                                             140
Ile Ala Ala Val Gln Asn Asp Ile Leu Lys Gly Ile Glu Ser Leu Thr
                    150
                                         155
His Pro Leu Thr Gln Leu Thr Ile Val Thr Ser Gly Ala Tyr Ala Gly
                165
                                     170
Pro Leu Glu Glu Tyr Leu Ile Lys Ser Ser Ser Val Met Thr Pro Thr
            180
                                185
Tyr
<210> 10805
<211> 71
<212> PRT
<213> Enterobacter cloacae
<400> 10805
Val Asn Ala Ala Met Leu Ser Leu Thr Asn Lys Glu Asp Asn His Met
Asn Ile Lys Thr Leu Lys Asn Asp Thr Val Glu Thr Val Ser Phe Leu
                                25
Val Lys Ala Leu Phe Phe Val Val Arg Lys Ile Tyr Leu Lys Pro Ala
                            40
Val Ala Val Cys Pro Leu Pro Gln Thr Leu Ala Glu Cys Arg Ile Tyr
Ala Ala Arg Ser Ile Cys
<210> 10806
<211> 356
<212> PRT
<213> Enterobacter cloacae
<400> 10806
Tyr Ser Lys Pro Thr Gln Arg Glu Arg Gly Met Ser Gln Gln Leu Arg
                                    10
Lys Arg Ser Asp Ile Glu Lys Lys Val Ala Ala Gly Glu Ala Val Lys
                                2.5
Glu Gln Pro Arg Gln Leu Ile Arg Asp Thr Ile Thr Gly Lys Ile Ile
```

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40
Ser Asn Glu Arg Val Pro Glu Thr Leu Pro Ala Cys Leu Ile Ala Met
                        55
                                            60
Gln Ser Asn Thr Leu Val Tyr Asn Asp Val Asp Val Glu Ala Phe Gln
                    70
                                        75
Arg Glu Val Arg Gln Gln Val Ser Gln Ile Leu Asp Ala Ile Arg Asp
                85
                                    90
Glu Arg Phe Glu Asn Ala Gly Ile Ala Tyr Gln Gln Phe Ile Asp Gln
                                105
Tyr Asp Ala Cys Phe Glu Thr Pro Ser Val Asp Val Leu Gly Glu Val
                            120
Lys Arg Arg Gly Ile Asp Leu Tyr Ala Val Leu Glu His Gln Gly Thr
                        135
                                             140
Arg Leu Thr Ala Glu Met Cys Val Gly Gly Ser His Asp Arg Ala Ser
                    150
                                         155
Glu Arg Ser Phe Asn Ala Val Thr Glu Ala His Ile Asn Leu Leu Phe
                165
                                     170
Tyr Met Leu Thr Leu Asn Leu Ala Ile His Asn Lys Ile Asp Asn Val
            180
                                185
Gln Lys Gln Leu Arg Thr Lys Leu Gly Phe Leu Glu Glu Arg Leu Arg
                            200
                                                 205
Thr Leu Leu Asn Glu Tyr Ile Tyr Ala Asn Gln Leu Gly Arg Ile Val
                        215
                                             220
Leu Asp Gly Leu His Ala Ser Glu Thr Leu Tyr Gly Trp Ile Leu Leu
                    230
                                         235
Glu Lys Asn Asp Leu Asp Ala Ala Arg Leu Ile Tyr Lys Asn Asp Leu
                                     250
                245
Lys Leu Asn Asn Glu Met Lys Phe Ala Glu Leu His Ala Glu Val Met
            260
                                265
Ser Ile Tyr Gln Lys Arg Tyr Thr Ser Glu Thr Pro Glu Asp Leu Arg
        275 .
                            280
Asn Arg Ala Phe Ser Arg Cys Gly Leu Ser Glu Asp Arg Ala Gln Phe
                        295
                                             300
Ala Phe Lys Leu Cys Tyr Tyr Leu His Gln Thr Gly Gln Ile Arg Lys
                    310
                                         315
Tyr Ile Asp Glu Leu Thr Leu Gly Ala Asp Asn Asn Asp Thr Ser Asp
                                     330
Ala Thr Val Asp Val Arg Ser Leu Leu Val Pro Ser Ala Ser Gly Leu
Ala Thr Gln
        355
<210> 10807
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10807
Asn Asn Cys Leu Val Arg Lys Thr Pro Gln Gly Ser Gly Tyr Ser Gly
                                     10
Ile Thr Ser Met Gly Ser Phe Ala Cys Arg Ala Trp Asn Ser Ser Met
            20
                                25
Gln Leu Ile Leu Asn Thr Ser Arg Gly Leu Ser Thr Val Val Ser Ser
                            40
Leu Ser Ile Ile Tyr Ser Phe Val Cys Asp Ile Tyr Phe
<210> 10808
<211> 125
<212> PRT
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<213> Enterobacter cloacae

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<400> 10808
His Thr Met Lys Arg Thr Ile Phe Phe Ala Leu Ser Thr Phe Leu Leu
                                    10
Ala Met Thr Ala Ser Ser Val Tyr Ala Ser Thr Glu His Thr Gly Met
                                25
Ser Asp Leu Arg Val Gln Lys Thr Ala Asn Ala Ser Tyr Cys Asn Pro
Gly Ser His Arg Cys Glu Ala Pro Phe Thr Ile Gly Arg Asp Asn Ile
                        55
Ala Lys Pro Asp Gly Ser Asp Lys Asn Tyr Cys Asn Pro Gly Ser His
                 - 70
                                         75
Arg Cys Glu Ala Pro Phe Ser Thr Gly Arg Asp Asn Ile Ala Lys Pro
                                     90
Asp Gly Thr Asp Lys Asn Tyr Cys Asn Pro Asn Ser Arg Lys Cys Asn
            100
                                105
                                                     110
Ala Pro Phe Thr Thr Gly His Asp Asn Ile Asn Gln
                            120
                                                 125
<210> 10809
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10809
Ala Arg Gln Gly Cys Ser Met Asn Thr Lys Leu Gln Ala Ser Leu Val
                                     10
Lys Val Pro Gln Ile Thr Leu Thr Phe Trp Ile Val Lys Ile Ala Val
            20
Thr Thr Leu Gly Glu Thr Gly Gly Asp Ala Val Ser Met Ser Met Gly
                            40
Ile Gly Tyr Ala Gly Arg Val Met Thr Pro Thr Tyr
<210> 10810
<211> 79
<212> PRT
<213> Enterobacter cloacae
<400> 10810
Ser Pro Lys Phe Phe Ser Lys Leu His Ile Thr Pro Pro Thr Ile Lys
                                     10
Asn Tyr Ser Gln His Tyr Leu Tyr Arg Ala Val Ser Gly Met Ile Val
                                25
Val Ala Asp Thr Ile Thr Lys Ile Leu His Phe Cys Asn Arg Pro His
                            40
                                                 4.5
Leu Ser Leu His Tyr Cys Asn Leu Leu Asp Thr Phe Asn His Val Leu
                        55
Asn Asn Val Leu Ala Ser Glu Phe Leu Ser His Thr Lys Lys
                    70
<210> 10811
<211> 279
<212> PRT
<213> Enterobacter cloacae
<400> 10811
Ser Ala Val Glu Ala Asp Ser Pro Asp Glu Tyr Gly Asn Ser His Pro
                                    10
Arg Gln Glu Thr Met Arg Pro Gln Gln Asn Thr Ser Pro Ala Phe Pro
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Met Asn Lys Val Pro Glu Val Thr Leu Phe Phe Trp Leu Ile Lys Met
Met Ser Thr Thr Val Gly Glu Thr Ala Ala Asp Phe Leu Asn Met Asp
                        55
Leu Asn Trp Gly Leu Thr Asn Thr Ser Leu Leu Thr Gly Ile Leu Phe
                    70
Ala Val Val Leu Thr Phe Gln Leu Arg Ala Asn Arg Tyr Ile Pro Ala
Leu Tyr Trp Ser Thr Val Leu Leu Ile Ser Val Phe Gly Thr Leu Ile
                                105
            100
Thr Asp Asn Met Thr Asp His Phe Gly Val Pro Leu Ala Leu Ser Thr
                            120
Ser Val Phe Gly Gly Leu Leu Val Leu Thr Phe Gly Leu Trp Tyr Ala
                                             140
                        135
Lys Glu Lys Thr Leu Ser Ile His Ser Ile Asn Ser Leu Lys Arg Glu
                    150
                                         155
Thr Tyr Tyr Trp Ile Ala Ile Leu Phe Thr Phe Ser Leu Gly Thr Ala
                165
                                    170
Ala Gly Asp Trp Ala Ala Glu Ser Leu Gly Leu Gly Tyr Leu Asn Ala
            180
                                185
Ala Ile Val Phe Gly Ala Leu Ile Ala Leu Thr Ala Val Ser Arg Tyr
                            200
Leu Phe Lys Ala Asn Ser Val Leu Cys Phe Trp Ile Ala Tyr Ile Leu
                        215
                                             220
Thr Arg Pro Leu Gly Ala Ser Cys Gly Asp Leu Leu Ser Gln Pro Leu
                    230
                                         235
Thr Ser Gly Gly Leu Gly Leu Gly Thr Thr Gly Thr Ser Ile Leu Phe
                                    250
Leu Leu Thr Ile Thr Ser Leu Ile Gly Tyr Leu Thr Tyr Lys Met Lys
                                265
Leu Glu Glu Ile Asn Arg
        275
<210> 10812
<211> 73
<212> PRT
<213> Enterobacter cloacae
<400> 10812
Lys Arg Asn His His Phe Ala Gly Cys Asn Lys Arg Gly Ala Ser Val
                5
                                    10
Phe Val Phe Ala Phe Ser Lys Asn Gln Thr Pro Cys Ile Gln Asn His
            20
                                25
Ser Tyr His Phe Leu Lys Asn Asp Phe Thr Ile Phe Ile Ser Lys Ala
                            40
Gly His Ser Leu Ser Phe Tyr Gly Gln His Thr Pro Asp Glu Pro Ala
                        55
Tyr Pro Ile Val Asn Ile Trp His
<210> 10813
<211> 108
<212> PRT
<213> Enterobacter cloacae
<400> 10813
Pro Pro Gly Thr Asp Val Asp Pro Arg Pro Gln Val Cys Ile Leu Ala
                                    10
Val Ala Ala Gly Ala Cys Pro Ala Ser Cys Pro Ala Val Cys Pro Ala
                                25
```

Gln Ala Val Val Glu His Gly Arg Gly Asn Ala Phe Ile Pro His Ile

Glu

35
Arg Arg Asn Val Thr Ser Arg Trp Gln Val Tyr Gly Arg Leu Trp Asp 50
Ala Asp Arg Gln Ala Leu Gly Ala Lys Leu Glu Ile Arg Ala Gly Leu 65
Trp Asn Arg Pro Glu Ile Gly Ala Phe Ser Phe Pro Gly Val Glu Leu 85
Arg Glu Lys Arg Arg Phe His Ala Pro Arg Phe 100

<210> 10814

<210> 10814 <211> 162 <212> PRT

<213> Enterobacter cloacae

<400> 10814 Ser Gln His Met Gln Phe Thr Gly Met Thr Asp Met Lys Lys Ile Leu Ala Ile Leu Leu Pro Thr Leu Ala Ser Ala Ala Gln Lys Phe 20 25 Pro Pro Glu Val Ser Ala Ala Leu Gln Phe Asn Lys Trp Tyr Ile Ser 35 40 Gln Ile Ile Gly Lys Glu Pro Leu Lys Asn Tyr Glu Ala Leu Arg 55 60 Pro Tyr Val Thr Arg Glu Thr Ile Ser Lys Leu Lys Ala Met Asp Lys 70 75 Leu Asp Pro Asp Glu Tyr Asp Val Pro Asp Val Asp Met Phe Ile Lys 90 Ala Gln Gly Tyr Glu Asp Asp Trp Asp Ile Val Ser Ala Arg Ala Leu 100 105 Asp Tyr Asp Ala Ala Cys Met Gln Val Tyr Ile Ser Phe Gly Lys Lys 120 Arg Asp His Thr Val Ile Asp Cys Met Val Lys Glu Asp Gly Val Trp 135 Lys Val Glu Ser Val Ala Ser Met Asn Ile Ser Asp Asn Leu Met Met 145 150

<210> 10815 <211> 82 <212> PRT <213> Enterobacter cloacae

<210> 10816 <211> 160 <212> PRT

## <213> Enterobacter cloacae

<400> 10816 Thr Met Leu Asn Ile Leu Ile Gln Glu Thr Asp Leu Phe Phe Gln Ala Gly Leu Gln Ser Phe Phe Glu Asp Phe Phe Lys His Asn Phe His Arg Ser Ile Thr Phe His Leu Ala Leu Thr Asn Glu Asn Val Ser Gln Ala Asp Ile Ile Val Leu Ser Leu Cys Gln Gly Glu Thr Leu Thr Cys Phe 55 Pro Glu Leu Leu Ala Arg Gln Lys Gly Ile Val Ile Gly Leu Val Asp 70 75 Asp Glu Leu Arg Phe Ser Ala Leu Pro Ser Cys Phe Gln Asp Ile Ile 90 Phe Leu Pro Arg Arg Ala Ser Leu Asp Arg Ile Ser Gly Val Leu Phe 100 105 Ile Ala Trp Phe Thr Thr Gln Leu Pro Gly Tyr Thr Trp Asn Lys Lys 120 125 Thr Cys Phe Asp Cys Gln His Lys Gly Leu Ser Arg Gln Gln Ile Arg 135 140 Ile Leu Val Asn Phe Tyr Arg Gly Leu Ser Val Val Gln Thr Ala 150 160 <210> 10817 <211> 77 <212> PRT <213> Enterobacter cloacae <400> 10817 Lys Ser Ile Ala Arg Leu Ala Thr Val Ala Phe Thr Ala Thr Val Glu Leu Leu Arg Thr Gly Lys Gly Tyr Ser Asp Gln Ile Ala Ile Met Pro Val Gly Ile Lys Gly Met Ser Phe Glu Met Arg Leu Asn Cys Leu Asn Thr Cys Phe Cys Met Leu Thr Gln Leu Lys Pro Val Val Cys His Thr 55 Ala Leu Leu Pro Ser Ala Leu Ser His Leu Ala <210> 10818 <211> 146 <212> PRT <213> Enterobacter cloacae <400> 10818 Ser Phe Asn Ile Asn Glu Ala His Met Arg Asn Phe Asp Met His Gly

```
Gln Arg Arg Ala Gly Phe Gly Arg His Gly His Cys Arg Trp His Asp
                            120
Gly Arg Asp Glu Lys Arg Asp Asp Asn Gly Ala Lys Ala Pro Glu Ala
                        135
Glu
145
<210> 10819
<211> 101
<212> PRT
<213> Enterobacter cloacae
<400> 10819
Asp Tyr Arg Thr Pro Met Thr Ala His Val Ser Asn Asp Pro Leu His
                                    10
Gly Val Thr Leu Glu Met Gln Val Asn Ala Leu Val Ala Arg Tyr Gly
            20
Trp Asn Glu Leu Gly Asn Arg Ile Lys Ile Asn Cys Phe Arg Lys Asp
                            40
Pro Ser Val Lys Ser Ser Leu Lys Phe Leu Arg Arg Thr Pro Trp Ala
Arg Ala Glu Val Glu Ala Leu Tyr Leu Asp Ser Leu His Asp Asp Gly
                                        75
Asn Gly Glu Gln Asp Glu Pro Ala Phe Asn Pro Trp Thr Asp Ser Arg
                                    90
Thr Pro Arg Ser
            100
<210> 10820
<211> 77
<212> PRT
<213> Enterobacter cloacae
<400> 10820
Phe Asn Gln Gly Leu Ile Thr Val Arg Ile Asp Leu Arg Asp Ile
                                    10
Arg Gly Ile Thr Val Lys Pro Asn Leu Phe Gln Cys Ile Thr Ser Glu
                                25
Met Ser Val Arg Arg His His Ser Pro Asp Asn Lys Gln Phe Val Asn
                            40
Ile Ile Leu Thr Gln Arg Thr Ser Leu Leu Ile Val Gln Ile Ala Gly
                        55
Cys Glu Ala Arg His Ser Phe Phe Ser Phe Tyr Pro
<210> 10821
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 10821
Ala Ile His Phe Phe Leu Ser Leu Ser Glu Phe Ser Ile Pro Asp Tyr
Leu Met Val Gly Phe Lys Tyr Lys Thr Gly Gln Lys Ile Leu Asn Gln
Glu Ala Met Leu Ser His Phe Phe Ala Thr Phe Pro Thr Val Ala Ala
                            40
Ala Val Phe Ser Asp Asn Ser Tyr Ser Leu Thr Val Asn Ala Gly Met
Gly Ala
```

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<210> 10822
<211> 205
<212> PRT
<213> Enterobacter cloacae
<400> 10822
Arg Met Ile Arg Gln Gly Phe Ile Leu Thr Thr Ala Met Leu Leu Ser
                                    10
Gly Cys Gly Tyr His Phe Ala Asn Gln Val Asp Ala Tyr Asp Leu Met
            20
                                25
Pro Arg Pro Val Thr Asn Lys Arg Phe Gln Ile Val Pro Pro Asp Glu
                            40
Ser Ile Gln Ser Arg Met Phe Ser Gly Arg Phe Ala Asp Gly Leu Ala
                        55
Lys Lys Gly Val Ile Ile Ser Thr His Gln Pro Asp Tyr Val Leu Arg
                    70
                                        75
Phe Arg Ile Ser Ser Gln Glu Asn Met Gln Tyr Ser Glu Gln Leu
                                    90
Leu Thr Gly Val Thr Gly Tyr Val Val Asp Lys Lys Thr Thr Arg Thr
            100
                                105
                                                     110
Asp Lys His Gly Glu Leu His Thr Asp Tyr Asp Tyr Lys Pro Val Asp
                            120
                                                 125
Gly Val Ile Gly Thr Glu Thr Met Ser Gln Met His Tyr Met Arg Gln
                        135
Leu Asp Val Glu Val Tyr Pro Ser Ala Lys Gly Ala Lys Gln Val Leu
                    150
                                        155
Lys Val Ser Met Gln Ser Asn Ala Pro Val Pro Ser Asp Ser Ile Ala
                                    170
Tyr Ser Ala Met Ile Asp Ala Phe Thr Asp Lys Phe Asp Ala Pro Leu
                                185
Arg Ser Gly Asn Tyr Val Ala Val Ile Pro Trp Asn
                            200
<210> 10823
<211> 65
<212> PRT
<213> Enterobacter cloacae
<400> 10823
Thr Thr Cys Ala Glu Thr Glu Leu Asn Ile Tyr Leu Ser Val Glu Gln
                                    10
Phe Asn Asn Thr Val Arg Pro Asn Phe Leu Lys Ser Leu Ser Asp His
                                25
Pro Asp Ala Leu Ala Thr Phe Glu Pro Asn Asp Leu Met Lys Leu Cys
                            40
                                                 45
Asn Arg Gln Gly Pro Leu Trp Val Ala Gly Ser Pro Gln Asp Pro Ser
                        55
65
<210> 10824
<211> 190
<212> PRT
<213> Enterobacter cloacae
<400> 10824
Asn Thr Ile Asn Lys Leu Glu Ser Leu Pro Ser Glu Val Asn His Tyr
                                   10
Tyr Glu His Cys Thr Val Pro Val Ile Asp Trp Phe Phe Lys Gln Ala
```

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Thr Glu Ala Leu His His Gly Leu Trp Leu Pro Ala Cys Thr Ser Phe
                            40
Leu Asn Gly Ile Glu Thr Ser Leu Arg Val Thr Leu Lys Leu Lys Ser
                        55
Thr Val Asn Val Gln Gln Ser Val Pro Val Leu Val Asp Leu Asp Gly
                    70
                                        75
Thr Ser Val Met Ser Asn Ala Leu Met Arg Lys Ala Lys Gln Glu Gly
                                    90
Met Pro Ile Glu Leu Leu Ser Phe Pro Ala Glu Lys Asn Met Leu Ala
            100
                                105
Lys Ile Asp Ala Gly Lys Lys Pro Glu Ala Asp Ile Val Arg Leu Arg
                            120
                                                 125
Asn Ser Leu Cys His Gly Asn Ile Leu Glu Phe Ile Met Ser Val Lys
                        135
                                            140
Val Gly Ser Pro Asp Pro Ile Arg Ile Phe Thr Pro Gly Asn Cys Cys
                    150
                                        155
Gly Leu Ala Leu Leu Ser Ala Leu Ser Lys Lys Trp Thr Val Gly
                                    170
                165
Leu His Gln Tyr Trp Ile Asp Asn Asn Leu Thr Ser Cys
            180
                                185
                                                     190
<210> 10825
<211> 119
<212> PRT
<213> Enterobacter cloacae
<400> 10825
Thr Met Lys Leu Lys Asn Ile Leu Leu Cys Ala Met Met Ser Val Ala
                                    10
Phe Gly Ser Ser Ala Asn Thr Thr His Lys Val Glu Asn Glu Pro Ile
            20
Pro Asn Ile Ile Leu Asp Gly Lys Val Asp Asp Ile Cys Lys Asp Ala
                            40
Ser Ile Arg Thr Glu Leu Asn His Asp Lys Ala Lys Glu Leu Val Thr
Thr Asn Leu Lys Gln Ala Leu Pro Leu Asn Thr Val Pro Asp Lys Leu
Asp Glu Val Ala Glu Ala Phe Val Asn Arg Asp Lys Gly Ala Ser Glu
Thr Ala Asp His Cys Leu Val Asn Val Arg Asn Lys Tyr Trp Glu Met
            100
Tyr Pro Ser Glu Asp Lys
        115
<210> 10826
<211> 134
<212> PRT
<213> Enterobacter cloacae
<400> 10826
Glu Val Cys Met Lys Ser Thr Leu Leu Ser Thr Leu Met Leu Val Ala
                                    10
Val Gly Val Gln Pro Val Phe Ala Ala Gln Cys Gln Tyr Gly Ala Cys
            20
                                25
Gly Thr Glu Asn Asp Pro Gly Ile Gly Phe Leu Met Ser Ser Val Gln
                            40
Met Asp Lys Gly Glu His Leu Lys Glu Leu Ser Gly Val Ala Thr Thr
                        55
Gly Asp Thr Ile Ser Lys Lys Met Glu Ser Tyr Leu Gly Asn Lys Lys
                    70
                                        75
Leu Lys Val Asn Thr Asp Ser Thr Arg Lys Gly Pro Gly Asn Thr Thr
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85 90 Ile Arg Pro Thr Asp Glu Leu Ala Pro Thr Arg Gln Leu Lys Val Ile 105 Arg Pro Glu Leu Val Lys Asn Pro Asp Ser Gln Leu Val Val Ala Phe 120 Asn Glu Arg Leu Ala 130 <210> 10827 <211> 148 <212> PRT <213> Enterobacter cloacae <400> 10827 Glu Arg Pro Glu Gly Lys Lys Met Ser Ile Leu Ser Ser Phe Val Ile 10 Arg Ala Thr Gly Ile Pro Asp Lys Lys Tyr Leu Arg Asp Pro Val Ile 20 25 Lys Arg Cys Tyr Lys Arg Leu Ser Arg Arg Val Pro Ala Leu Met Thr 35 40 Gly Trp Leu Leu Cys Ile Leu Gly Ser Gly Tyr Val Ser Met Ala Leu 55 60 Glu Gln Pro Asp Ser Thr Val Leu Leu Ser Leu Leu Leu Tyr Val 70 75 Met Ser Gly Ile Leu Leu Met Gln Phe Gln Tyr Met Tyr Ser Glu Arg 90 Ser Ile Gly Tyr Lys Phe Tyr Leu Glu Val Leu Met Asn Ala Ala Ala 100 105 Ser Thr Gln His Lys Glu Gln Leu Gln Tyr Leu Phe Ile Asn Lys Pro 120 125 Asn Ser Ile Thr Met Gly Asp Leu Tyr Arg Leu Tyr Asp Phe Asn Gly 135 Gly Gly Arg 145 <210> 10828 <211> 374 <212> PRT <213> Enterobacter cloacae <400> 10828 Lys Arg Pro Cys Tyr Thr Ser Ser Asn Leu Phe Phe Val Cys His His 10 Asn Arg Ile Arg Lys Gly Glu Arg Ser Met Thr Arg Ile Ala Leu Ala 25 Pro Ser Lys Met Val Leu Leu Met Ser Leu Val Ile Thr Gly Ala His 40 45 Ala Ser Pro Glu Gln Pro Leu Ile Lys Asp Thr Pro Phe Val Ser Gly 55 60 Gln Ala Tyr Lys Lys Gly Phe Phe Trp Tyr Asp Asp Pro Ala Lys Lys 70 7.5 Ser Glu Ala Glu Glu Glu Val Leu Pro Pro Thr Gly Ala Ala Ser 85 90 Ser Pro Ser Lys Glu Glu Met Val Asp Leu Asn Ser Lys Trp Leu Lys 100 105 110 Glu Asn Met Pro Arg Leu Leu Thr Gln Ala Met Asp Asn Pro Thr Ala 120 125 Glu Asn Leu Ser Arg Tyr Tyr Thr Ala Gln Arg Leu Met Leu Asp Ile 135 140 Ser Thr Arg Phe Ser Asp Lys Ser Lys Asp Tyr Phe Leu Lys Asn Pro 150 155

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Met Met Ser Glu Lys Arg Arg Gln Pro Val Glu Lys Val Ala Leu Asp
                165
                                    170
Ala His Arg Thr Val Val Glu Lys Asn Gln Gln Thr Val Met Lys Asp
                                185
Ile Phe Thr Lys Ser Gly Leu Phe Phe Phe Gln Ser Thr Cys Gln
                            200
Phe Cys His Glu Glu Ser Gln Ile Leu Gln Phe Met Gln Asn Tyr Tyr
                        215
Ser Val Asp Ile Leu Pro Ile Ser Met Asp Gly Arg Pro Leu His Asn
                    230
                                        235
Gly Leu Phe Gln Asp Phe Asn Ile Pro Asn Ala Gln Ile Ile Asp Gln
                                    250
                245
Phe Lys Ile Arg Glu Val Pro Thr Ile Phe Leu Val Ser Lys Asp Gly
            260
                                265
Thr Ser Ala Gln Arg Ile Ser Glu Gly Met Ile Ser Ala Asp Glu Leu
                            280
Lys Asn Thr Ile Ile Leu Ala Ala Lys Gly Met Asn Leu Ile Asp Asp
                        295
                                            300
Ala Ser Phe Gln Ser Thr Leu Asp Ile Lys Arg Gln Tyr Thr Ile Gly
                    310
                                        315
                                                             320
Asp Asp Gly Val Ile Thr Val Asn Lys Ser Glu Met Glu Ser Asp Pro
                325
                                    330
Phe Leu Leu Gln Lys Ile Met Asp Gln Lys Leu Glu Gly Tyr Asp Met
                                345
Pro Thr Ala Asp Pro Val Asn Tyr Leu Asn Ala Gly Gly Ser Phe Gly
                            360
Gly Thr Tyr Ala Gln
   370
<210> 10829
<211> 64
<212> PRT
<213> Enterobacter cloacae
<400> 10829
Thr Asn Ala Ala Lys Ile Arg Gln Thr Ser Arg Gln Thr Arg Cys Ala
                                    10
Asp Phe Ile Glu Thr Ser Phe Glu Ser His Met Leu Pro Leu Lys Tyr
           20
                                25
Ile Val Thr Phe Ile Asn Ala Ile Gln Ala Lys Ser Met Asn Leu Arg
Ile Leu Arg Ala Val Ser Asp Arg Gln Cys Asn Ala Ile Ala Tyr
<210> 10830
<211> 105
<212> PRT
<213> Enterobacter cloacae
<400> 10830
Leu Ser Lys Glu Val Ser Met Lys Ser Ala His Leu Val Cys Leu Leu
                                    10
Val Cys Leu Ile Phe Ala Ala Phe Val His Ala Gln Glu Lys Ser Ala
                                25
Pro Glu Lys Glu Ala Gln Ile Lys Gln Gln Val Leu Lys Asp Val Lys
Lys Thr Cys Thr Pro Gln Lys Lys Gln Ser Asp Lys Ala Trp Gln Ala
Met Ile Leu Ser Ser Glu Ala Asn Gln Leu Leu Ile Lys Asn Ala Ile
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Thr Ala Val Lys Arg Asp Asn Leu Asp Ala Tyr Trp Asp Ala Val Ser

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85 90 95
Gln Val Asp Cys Met Glu Asp Tyr
100 105
```

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<210> 10831
<211> 156
<212> PRT
<213> Enterobacter cloacae
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<400> 10831 Phe Ser Leu Ser Thr Val Phe Ala Trp Arg Ser Trp Cys Gly Asn Thr Val Pro Lys Pro Glu Gly Thr Arg Met Tyr Asp Val His Val Ile Phe Arg Asp Gly Pro Gly Glu Leu Ala Arg Phe Gly Gln Leu Leu Gly Arg Asn Gly Val Gly Leu Glu Gly Gly Gly Val Phe Gly Thr Asp Ala His 60 Phe Leu Val Glu Asp Gly Glu Lys Ala Arg Arg Val Leu Leu Asp Ala 70 75 Gly Phe Thr Val Gln Ala Leu Arg Lys Pro Val Ile Arg Lys Leu Lys 90 Gln Glu Arg Pro Gly Glu Leu Gly Glu Ile Ala Ala Leu Ala Ala Arg Gly Val Ser Ile Leu Thr Gln Tyr Ser Asp His Ala Asn His Leu 120 Ile Leu Leu Thr Asp Asp Asp Lys Leu Ala Ala Glu Ile Thr Thr Pro 135 Trp Ala Thr Asn Val Lys Asp Glu Leu Thr Leu

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<210> 10832
<211> 363
<212> PRT
<213> Enterobacter cloacae
```

150

<400> 10832 Ala Cys Phe Thr Met Ser Ile Ser Thr Leu Ala Arg Val Phe Thr Pro His Gly Asn Ile Val Tyr Thr Ala Asn Asp Phe Arg Gln Thr Leu Arg 25 Ile Val Phe Ala Gly Met Ile Ala Leu Ser Ile Ser Ser Phe Tyr Asn 45 40 Thr Ser Tyr Gly Val Phe Phe Val Val Tyr Pro Ile Met Leu Leu Ser 55 Leu Val Pro Val Phe Asn Arg His Val Ala Lys Gln Phe Ile Phe Ser 75 70 Ala Ser Leu Asn Cys Val Glu Met Val Leu Ile Ile Gly Tyr Leu Ser 85 90 Gln Trp Pro Val Ile Met Thr Leu Val Val Phe Ala Leu Tyr Val Met 105 110 Arg Phe Arg Phe Met Ser Lys Gly Pro Leu Phe Leu Phe Gly Ser Met 120 Gly Val Val Cys Gln Ser Val Met Leu Asn Phe Met Ser Tyr Pro Thr 135 Thr Asn Trp His Thr Leu Leu Phe Ser Asn Ile Glu Ala Ser Val Met 150 155 Ala Val Cys Leu Ser Ala Leu Met Asn Tyr Leu Leu Pro Asp Val Glu 170 Pro Arg Lys Pro Pro Pro Leu Ile Glu Lys Asp Asp Ala Arg Val Arg

```
His Glu Ser Leu Leu Ser Gly Thr Val Ala Thr Leu Ile Phe Val Val
                            200
Phe Gln Ile Ser Asp Leu Ser Asp Ser Leu Ser Ala Leu Met Ala Gly
                        215
                                             220
Ile Leu Ile Leu Phe Pro Met His Tyr Arg Gly Ser Val Ile Ser Ser
                                        235
                    230
Ile Trp Arg Val Val Gly Val Leu Gly Cys Leu Tyr Ile Leu Val
                                    250
                245
Val Gln Leu Ile Leu Tyr Asp His Ser Ser His Met Leu Leu Met Met
            260
                                265
Pro Leu Ile Gly Leu Gly Leu Ala Phe Gly Ala Arg Leu His Val Met
                            280
Glu Lys Val Gly Ala Gly Val Gly Phe Ala Ser Ile Thr Thr Ile Gly
                        295
    290
                                             300
Ile Met Phe Gly Gln Asn Met His Pro Asp Ser Asp Leu Val Phe Ser
                    310
                                        315
Asp Leu Tyr Arg Ile Thr Ser Val Thr Phe Ala Leu Val Val Thr Leu
                325
                                    330
Thr Met Val Phe Leu Val His Leu Ile Leu Asn Arg Phe Glu Ala Thr
            340
                                345
Arg Tyr Val Ile Ala Pro Pro Lys Ala Asp
        355
                            360
<210> 10833
<211> 83
<212> PRT
<213> Enterobacter cloacae
<400> 10833
Phe Ile Lys Gly Pro Gln His Gly Arg Arg Gly Ala Gly Ile Ile Asn
                                    10
Tyr Lys Val Asp His Ser Cys Ser Trp Arg Arg Ala Val Ser Arg Thr
Ala Gly Ala Gly Asn Cys Val Gln Cys Ala Pro Val Asn Gly Leu Ile
Pro Phe Phe Arg Arg Asn Leu Glu Gly Asp Lys Ile Val Ile Ile Gln
Ser Arg Asp Lys Gln Arg Arg Phe Phe Ile Ile Ile His Lys Ser Gly
Ala Glu
<210> 10834
<211> 90
<212> PRT
<213> Enterobacter cloacae
<220>
<221>UNSURE
<222>(90)
<400> 10834
Arg Ser Gly Phe Ile Tyr Pro Gln His Arg Leu Ile Gln Glu Val Thr
                                    10
Tyr Asp Ser Phe Arg Ser Asn Phe Leu Phe Phe Tyr Tyr Phe Leu Gly
                                25
Ser Leu Leu Pro Val Tyr Pro Ala Pro Ile Thr Lys Lys Val Gly Met
                            40
Leu Val Val Pro Leu Thr Leu Thr Phe Gly Cys Tyr Ile Tyr Ala Ile
His Leu Asp Asp Ser Ala Gln Gln Thr Asn Leu Leu Val Val Thr Thr
```

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70
                                                             80
Gly Asp Lys Ser Thr Arg Ala Lys Arg Xaa
                85
<210> 10835
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10835
Ile Glu Ala Val Leu Val Leu Ile Ala Ile Pro Val Arg Pro Val Ser
                                     10
Thr Ala Gly Ile Ser Ile Pro Phe Ala Arg Glu Lys Thr Phe Thr Thr
                                25
Asp Gly Ile Lys Ser Ala Ser Gln Ser Thr Tyr Pro Cys Lys Gln Ile
                            40
Asp Lys Ala Lys Val Pro Val Leu Ile Ile Ser Arg Ser
                        55
    50
<210> 10836
<211> 337
<212> PRT
<213> Enterobacter cloacae
<400> 10836
Ile Arg Ser Thr Lys Gly Gly Lys Arg Val Met Gly Arg His Gln Pro
Cys Pro Thr Met Ala Val Glu Thr Gly Lys Arg Lys Ala Gln Lys Gly
            20
Glu Arg Glu Glu Ile Thr Met Met Lys Glu Pro His Pro Leu Leu Gln
Leu Val Leu Asn Asp Ser Gly Arg Leu Thr Met Pro Val Tyr Tyr Arg
                        55
Asp Gln Gln Tyr Cys Pro Thr Cys Leu Thr Lys Val Leu Lys Ser Glu
                    70
                                         7.5
Asp Gly Ser Leu Ala His Leu Gly Glu Ile Asn Gln Asn Thr Cys Arg
Pro Ser Ile Ser Val Val Val Thr Lys Ala Ile Ile Glu Met Leu Cys
            100
                                105
Asp Gly Glu Lys Ile Phe Val Asn Pro Ile Arg Tyr Arg Gly Arg Val
                            120
                                                 125
Leu Ala Pro Ser Val Ile Phe Ser Pro Asp Thr His Thr Phe Lys Pro
                        135
                                            140
Phe Ile Asn Thr Asp Tyr Gln Pro Val Gly Ala Asn Trp Lys Ser Glu
                    150
                                        155
Lys Gly Tyr Lys Leu Gly Leu Phe Tyr Leu Lys Asp Arg Ala Asn Ser
                165
                                    170
Ile Asn Lys Glu Glu Phe Asp Phe Ile Ala Val Ile Asp Pro Lys Ala
            180
                                185
Met Gln Lys Glu Phe Ile Ser Ala Trp Ser Glu Val Asp Glu Lys Asn
        195
                            200
                                                205
Pro Leu Glu Thr Leu Lys Gln Ile Leu Arg Ser Lys Asn Asn Ser Ser
                        215
                                            220
Leu Trp Val Lys Trp Pro Gly Lys Ile Glu His Ala Gln Lys Gly Asn
                    230
                                        235
Cys Asn Glu Asn Tyr Trp Phe Asp Tyr Gln Ser Asp Asn Gln Glu Val
                                    250
Asn Cys Thr Val Ser Val Val Gly Ile Glu Gly Asn Ser Ser Gly Glu
            260
                                265
Thr Ile Tyr Arg Leu Gln Thr Leu Leu Lys Arg Lys Leu Asn Glu Tyr
```

Gln Leu Val Arg Ser Leu Gly Thr Ile Met Leu Leu Asp Asn Thr Gly 290 295 300

Asn Met Ile Pro Ser Asn His Pro Tyr Phe Glu Val Ile Ser Lys Ala 305 310 315 320

Cys Ile Asn Gly Val Arg Asp Phe Val Arg Gln Asn Pro Trp Val Val 325 330 335

<210> 10837 <211> 120 <212> PRT <213> Enterobacter cloacae

<400> 10837

Leu Val Ser Pro Ala Arg Tyr Gly Ile Leu Phe Met Phe Gly Arg Leu 1.0 Gln Tyr Arg Pro Gly Thr Met Asp Lys Gln Gly Pro Gln Ile Gly Ile 25 Thr Ser Leu Ala Tyr Pro Glu Gln Asp Leu Phe Thr Pro Thr Gly Val 40 Leu Thr Trp Asn Gln Ser Glu Pro Gly Ser Gln Leu Ser Ala Ile Leu 55 Glu Ile Val Gly Phe Thr Asn Gly Arg Asn Gln Arg Ala Gly Gly Asn Arg Ala Asn Thr Arg Asp Leu Ala Asp Thr Leu Ala Glu Ser Ile Leu 85 90 Pro Ile Ala Leu Leu Asn Leu Leu Val Glu Cys Ser Asp Asp Ile Glu 100 105 110 Gln Val Arg His Val Val Leu

120

<210> 10838 <211> 443 <212> PRT

115

<213> Enterobacter cloacae

<400> 10838

Glu Thr Thr Met Ser Gln Lys Phe Ala Val Met Ile Ala Tyr Asp Asp Asp Pro Asn Val Lys Arg Tyr Ser Pro Asp Phe Gln Thr Gln Asp Glu Phe Ala Lys Gly Trp Gln Ser Ala Leu Lys Lys Ala His His Thr Ser Gly Gln Lys Ser Val Ile Thr Cys Gly Cys Arg Gly Lys Gly Glu Lys 55 Arg Leu Tyr Val Arg Ala Leu Pro Asn Gly Asp Ala Phe Ile Leu Val 75 Lys Ala Ala Asn Thr Gly Ile Glu His Asp Pro Ser Cys Val Phe Phe 85 90 Ser Leu Asp Ala Arg His Thr Gly Leu Lys Gly Tyr Ala Ser Gly Val 100 105 110 Val Arg Ile Thr Thr Glu Gly Asp Met Ala Val Arg Leu Gly Ile Gly 120 125 Met Thr Glu Lys Asp Pro Pro Glu Lys Ser Glu Val Pro Pro Leu Pro 135 140 His Val Gln Arg Pro Glu Gly Gln Ala Ser Met Thr Leu Leu Gly 150 155 Leu Leu Ser Leu Leu Trp Thr Glu Ser Gly Leu Asn Val Trp Tyr Pro 170 Lys Met Ala Gly Lys Arg Asn Asp Ser Leu Val Arg Tyr Arg Leu Leu

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180
                                185
Glu Thr Ala Lys Gln Ile Arg Thr Gly Arg Ala Cys Ile Gly Asp His
                           200
                                               205
Leu Phe Ile Gly Val Pro Asp Pro Lys Gln Pro Val Ala Gln Ser Gln
                        215
                                            220
Ile Gln Arg Leu Ser Ser Gln Ala Met Ser Asp Lys Arg Leu Met Leu
                    230
                                        235
Leu Ser Val Leu Pro Arg Tyr Asp Ala Glu Lys His Glu Lys Pro Leu
                                    250
Lys Phe Leu Pro Leu Arg Asn Phe Gly Gly Leu Pro Leu Ile Phe Phe
                                265
Asn Ser Glu Gly His Trp Asp Ser Val Lys Lys Arg Phe Ser Ser Glu
                            280
Tyr Ala Ala Trp Lys Ser Gly Ala Lys Ile Val Val Phe Ala Leu Thr
                        295
                                            300
Ser Pro Ala Ala Val Thr Gly Arg Gly Pro Ser Val Arg Ala His Gln
                    310
                                        315
Ile Val Leu Met His Val Ser Glu Asn Trp Ile Pro Leu Asp Ser Ser
                325
                                    330
Tyr Glu Ala Val Val Ala Glu Lys Leu Asp Ala Glu His Arg Gln Tyr
                                345
            340
                                                     350
Val Lys Pro Met Arg Tyr Asp Ala Ser Ile Ser Glu Val Phe Pro Asp
                            360
                                                 365
Phe Tyr Leu Leu Asp Thr Lys Ser Asp Lys Pro Phe Pro Met Glu Val
                        375
                                            380
Phe Gly Met Ala Thr Pro Ala Tyr Leu Ala Arg Lys Gln Leu Lys Lys
                    390
                                        395
Asp Tyr Tyr Asn Arg Glu Tyr Gly Pro Tyr Gly Trp Trp His Trp Asp
                405
                                    410
Ala Thr Thr Ala Ser Glu Thr Met Val Leu Pro His Phe Pro Glu Ser
            420
                                425
Arg Lys Pro Leu Ser Thr Gly Thr Pro Ala
        435
<210> 10839
<211> 72
<212> PRT
<213> Enterobacter cloacae
<400> 10839
Asn Gly Glu Lys Met Ser Tyr Met Leu Ser Leu Ser Glu Gln Thr Lys
Leu Asn Ala Phe Leu Ser Gly Ile Leu Asp Asp Tyr Lys Thr Gly Val
Ile Thr Gln Ile Gln Ala Val Gly Lys Ile Gly Asn Val Phe Ser Ala
Leu Glu Ser Gly Asp Ser Lys Lys Val His Leu Leu Thr Glu Gly
Arg Lys Leu Leu Arg Thr Gly
<210> 10840
<211> 83
<212> PRT
<213> Enterobacter cloacae
<400> 10840
Ala Ser Asn Ala Val Met Val Ser Pro Ser Thr Ile Leu Thr Thr Phe
                                    10
Ala Ser Lys Val Val Glu Phe Pro Gln Asp Ala Thr Gly Asn Thr Thr
```

Ile Met Met Gly Lys Ser Asn Phe Val Lys Lys Asn Ile Ile Ser Pro 40 Glu Phe Val Glu Tyr Arg His Val Ser Thr Ser Leu Phe Thr Gly Ser Ile Leu Thr Ser His Tyr Phe Met Gly Gly Leu Lys Thr Asn Leu Phe 70 Ala Thr <210> 10841 <211> 61 <212> PRT <213> Enterobacter cloacae <400> 10841 Cys Gln Arg Ser Thr Met Thr Tyr Phe Glu Ser Ala Glu Gly Glu Thr 10 Val Ser Lys Glu Arg Ala Leu Gln Glu Leu Ser Arg His Cys Val Pro 20 25 Glu Thr Asp Phe Glu Glu Phe Phe Ser Asp Met Gly Val Lys Glu Gln 40 Tyr Asp Ala Gln Glu Val Leu Leu Trp Leu Gly Tyr 55 <210> 10842 <211> 123 <212> PRT <213> Enterobacter cloacae <400> 10842 Phe Lys Ala Thr Met Asn Met Lys Lys Pro Lys Ala Ala Leu Gln Asn 10 Ala Met Lys Glu Asp Val Pro Ala Val Thr Gln Ile Gln Met Arg Ser Thr Val Ser Arg Lys Val Arg Tyr Val Lys Gln Ala Asn Arg Glu Gly 40 Leu Lys Leu Ser Glu Trp Met Ser Arg His Leu Asp Ala Val Cys Asp 55 Thr Ala Asp Glu Ile His Lys Gly Lys Arg Ser Thr Pro Val Ala Pro 75 Gly Lys Ile Pro Pro Glu Val Tyr Gln Val Ile Tyr Asp Gln Cys Gly 90 Gly Phe Val Glu Cys Asp Ala Asn Ala Gln Val Ile Trp Glu Ala Cys Arg Asp Ala Ile Leu Asn Gly Asp Lys Gly <210> 10843 <211> 110 <212> PRT <213> Enterobacter cloacae <400> 10843 Gly Asn Arg Met Cys Asp Phe Cys Arg Ala Asp Glu Asn Tyr Phe His 1.0 Met Ala Glu Cys Val Tyr Asp Gln Leu Val Lys Glu Tyr Pro Val Met 25 Trp Leu Arg Asp Ser Thr Arg Ile Gly Ala Cys Tyr Leu Cys Arg Glu 40

Leu Leu Ser Pro Glu Gly Met Val Leu Ala Met Gln Ser Ala Phe Pro

<212> PRT

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Ala Lys Gly Trp Arg Leu Arg Ile Trp Tyr Asn Glu Thr Ile Asp Glu
                    70
                                         75
Glu Ile Glu Pro Gln Arg Gly Asp Cys Ile Glu Leu Ser Ser Arg Ala
                85
                                    90
Asp Ala Leu Leu Ser Phe Met Ser Phe Gln Glu Lys Val
                                105
<210> 10844
<211> 76
<212> PRT
<213> Enterobacter cloacae
<400> 10844
Ala Arg Ile Ala Asp Thr Ser Leu Val Pro Ser Phe Ile Arg Asn Ser
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Gln Ser Glu Phe Arg Val Ser Gln Val Asn Ile Asn Ser Val Lys Gln
                                25
            20
Thr Ile Asn Met His Lys Thr Met Gly Trp Phe Gly Ile Phe Met Ala
        35
                            40
Phe Phe Ser Cys Gln Arg Lys Ala Glu Val Ser Pro Ser Val Arg Asn
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Arg Asp Val Met Leu Trp Phe Arg Glu Cys Val
                    70
<210> 10845
<211> 75
<212> PRT
<213> Enterobacter cloacae
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Phe Thr Ser Asp Met Ala Thr Cys Glu Met Gly Met Val Thr Val Ile
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Thr Met Cys Leu Leu Ala Val Leu Val Thr Gln Pro Leu Lys His Ile
                                                     30
Thr Phe Lys Tyr Asp Phe Leu Leu Gly Leu Asn Met Cys Leu Ser Ile
                            40
Val Arg Gln Pro Ile Phe Thr Pro Thr His Glu Leu Asn Lys Asn His
Lys Leu Asn Glu Arg Phe Asn Ser Leu Ala
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<210> 10846
<211> 67
<212> PRT
<213> Enterobacter cloacae
<400> 10846
Ile Cys Ala Leu Val Ser Phe Trp Ala Glu Leu Leu Lys Pro Asp Ile
                                    10
Pro Ser Arg Pro Tyr Ile Lys Gln Ser Ala Ser Ser Ser Thr Gly Gly
          20
                                25
Gln Cys Leu Thr Gly Asn Ser Lys Asp Ile Leu Phe Ala Asp Lys Phe
                            40
                                                45
Asp Ile Gly Phe Thr His Ser Lys Ser Lys Leu Leu Lys Thr Leu Leu
Tyr Arg
65
<210> 10847
<211> 208
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#### <213> Enterobacter cloacae

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<400> 1084.7
Ile Cys Leu Ile Arg Leu Ser Met Met Asn Lys Glu Gln Leu Ile Asp
Lys Leu Glu Arg Val Val Cys Gly Gln Tyr Ser Tyr Glu Met Gln Glu
Leu Ala Tyr Ser Ala Leu Cys Cys Ile Lys Gly Thr Pro Asp Asp Cys
        35
                            40
Ala Lys Phe Pro Val Thr Arg Pro Leu Pro Asp Thr Leu Val Asp Val
                        55
Trp Asp Glu Ile Gly Gln Tyr Leu Gly Thr Gly Lys Ala Ile Glu Thr
                    70
                                        75
Arg Ser Cys Gly Val Ser Leu Leu His Gly His Cys Tyr Asp Ser
                                    90
                85
Asn His Val Leu Tyr Trp Arg Asn Ala Gly Ala Leu Pro Ala Ala Cys
            100
                                105
                                                    110
Asp Thr Pro Leu Ala Gly Gly Ser Arg Lys Leu Phe Thr Cys Ser Ala
                            120
Cys Gly Val Asp Gly Leu Asp Glu Pro Pro Glu Thr Ser Cys His Cys
                        135
                                            140
Cys Thr Glu Gly Ala His Trp Ile Glu Ser Arg Leu Phe Thr Ser Gly
                    150
                                        155
Gln Ala Asp Pro Glu Glu Phe Arg Pro Val Ala Val Lys Glu Cys
                                    170
Ala Gly Ser Thr Pro Asp Asp Arg Leu Ile Trp Ser Val Ile Glu Gln
                                185
Leu Asn Gly Glu Leu Ala Glu Gly Asp Lys Leu Phe Lys Gln Arg
                            200
<210> 10848
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## <400> 10848

Ser Gly Lys Pro Ala Val Met Pro Phe Leu Thr Glu Thr Lys Gly Lys 10 Arg Glm Val Ser Pro Val Ile Phe Thr Leu Val Arg Lys Ile Leu Met 25 Asn His Glu Ser Arg Thr Val Tyr Leu Asn Thr Ala Ile Glu Ala Leu 40 Leu Lys Ala Glu Ala Ala Leu Asn Glu Leu Ala Leu Ala Tyr Val Leu 55 Lys Pro Gly Glu Lys Ala Ser Ala Cys His Pro Arg Thr Gly Thr Leu 75 70 Ser Thr Ala Ser Gln Val Arg Lys Leu Arg Arg Val Leu Glu Lys Asn 85

Lys Leu

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<210> 10849
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# <400> 10849

Leu Ser Gln Pro Arg Arg Ile Ser Pro Leu Ile Arg Thr Phe Leu Lys 10 Ser Ser Asp Asp Phe Ser Arg Glu Leu Ser Phe Leu Phe His Arg Ser

<sup>&</sup>lt;211> 99

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

<sup>&</sup>lt;211> 308

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Enterobacter cloacae

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Ile Lys Ile Arg Asn Ser Gly Phe Ala Ile Phe Gly Ala Gly Leu Leu
                            4Ω
Ile Met Ile Phe Gly Leu Cys Leu Trp Leu Leu Ser Leu His Leu Ser
                        55
Pro Ser Val Leu Asp Phe Asp Ile Asp Val Pro Leu Ser Phe Phe Asn
                                        75
                    70
Ser Ser Glu Gly Glu Asp Lys Leu Val Val Ser Asp Phe Gly Asp Ala
                                    90
Phe Gly Gly Phe Leu Thr Thr Tyr Ser Lys Leu Leu Gly Ile Met
            100
                                105
Gly Leu Leu Val Val Ser Ser Thr Ala Phe Lys Ile Leu Lys Gly Glu
                            120
                                                 125
Glu Ile Gly Glu Ile Phe Pro Met Leu Ile Ala Gly Ala Phe Leu
                        135
                                            140
Ile Gly Leu Ser Val Phe Thr Ser Ala Leu Gly Ser Glu Glu Thr Asp
                    150
                                        155
Ala Thr Ser Ala Ser Thr Val Lys Val Ile Lys Lys Tyr Val Lys His
                                    170
                165
                                                         175
Glu Lys Tyr Asp Lys Leu Val Ala Tyr Leu Asn Asp Ser Asn Trp Pro
            180
                                185
                                                     190
Ser Gly Glu Glu Val Ser Val Asn Tyr Leu Lys Ala Gln Leu His Ile
        195
                            200
                                                 205
Lys Leu Gly Lys Pro Asp Val Lys Leu Thr Gln Asn Val Val Arg Ala
                        215
                                            220
Tyr Met Ser Gly Val Leu Gln Ser Asn Ile Pro Val Lys Val Arg Tyr
                    230
                                        235
Ala Leu Glu Lys Thr Ala Leu Asp Lys Ser Val Ser Pro Leu Ala Ile
                245
                                    250
Arg Tyr Glu Gln Lys Arg Met Ser Lys Ser His Thr Phe Ser Lys Ala
                                265
Ser Val Asn Cys Leu Lys Val Gly Ser Pro Val Ala Phe Val Gly Val
                            280
Leu Phe Ala Leu Leu Gly Ile Lys Ile Arg Arg Arg Val Arg Phe Leu
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                        295
Glu Ser Asn
305
<210> 10850
<211> 79
<212> PRT
<213> Enterobacter cloacae
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Gly Tyr Met Met Cys Asn Phe Thr Pro Val Gln Ile Ile Ala Asp Tyr
                5
                                    10
Ile Leu Arg Phe Leu Lys Asn Asn Thr Asp Ala Lys Leu Tyr Glu Ala
                                25
Met Gln Arg Leu Glu Lys Lys Ile Gly Gln Phe Val Ala Asp Gly Val
                            40
                                                45
Asp Glu His Gln Leu Arg Ser Ser Leu Ser Lys Val Cys Arg Ser Arg
                        5.5
Ser Arg Ala Ala Leu Lys Glu Glu Cys Glu Gln Leu Ile Pro
                    70
<210> 10851
<211> 102
<212> PRT
<213> Enterobacter cloacae
<400> 10851
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Gly Arg Glu Gly Met Ser Gly Leu Ser Ser Ser Ala Gln Lys Leu Thr

5986 10 Arg Ala Gln Ile Tyr Val Leu Arg Arg Met Ala Ser Gly Thr Ile Tyr 25 Asp Ile Ser Gly Asn Phe Arg Arg Ala Arg Glu Arg Arg Thr Phe Met 40 Gly Asn Pro Asp Asp Val Thr Cys Arg Ser Ser Pro Val Leu Phe Arg 55 Leu Gly Leu Val Glu Leu Cys Gln Pro Val Arg His Leu Glu Pro Gly 75 Leu Tyr Tyr Arg Leu Lys Leu Ser Ser Ser Gly His Glu Ala Leu Lys Ala Asn Ala His Leu 100 <210> 10852 <211> 93 <212> PRT <213> Enterobacter cloacae <400> 10852 Glu Thr Glu Pro Asp Thr Ser Leu Leu Ser Gly Lys Ala Gly Gln Gln 10 Met Glu Arg Gln Glu Leu Asn Pro Leu Val Leu Ile Met Ile Glu Glu 20 25 Asn Lys Met Lys Asp Asn Lys Thr Arg Pro Val Asp Ser Tyr Ala His 40 Ala Asp Phe Met Glu Ser Val Phe Ser Asn Leu Arg Ala Phe Cys Asp 55 60 Ala Glu Cys Gln Arg Leu Thr Ala Gly Tyr Pro Pro Thr Val Lys Pro 70 Glu Gln Gln Ser Thr Asp Gly Gln Leu Ser Ala Ala 8.5 <210> 10853 <211> 65 <212> PRT <213> Enterobacter cloacae <400> 10853 Ile Ile Thr Cys Gln Phe Val Gln Ile Ser Ala Ser Leu Ser Pro Gly Gln Lys Pro Gly Ser Ile Gln Lys Leu Asn Val Pro Val Tyr Leu Tyr 25 Ile Ser Ser Ile Pro Cys Asp Leu Gln Glu Thr Arg Thr Gly Leu Ala Ile Pro Val Leu Pro Leu Ser His His Trp Pro Arg Gln Pro Glu Lys 65 <210> 10854 <211> 123 <212> PRT

<213> Enterobacter cloacae

<400> 10854

Trp Ala Thr His Ser Val Ser Thr Ser Leu Thr Ile Lys Val Leu Phe 10 Met Ser Asn Ser Phe Asp Lys Pro Gln Thr Leu Pro Val His Asn Ser 25 Asp Ala Glu Pro Phe Pro Lys Asn Leu Gly Pro Phe Ile Glu Gln

40 Val Ser Gly Arg Asp Leu Ala Met Leu Thr Glu Ser Glu Lys Glu Lys Leu Ala His Leu Ile Arg Thr Gly Arg Lys Tyr Gly Val Ser Val Ala 70 75 Ile Val Pro Asp Thr Asp Ser Ala Glu Leu His Glu Leu Leu Ser Asn 90 Ala Asp Ser Ile Glu Arg Gln Phe Ser Ile Tyr Glu Arg Ile Gln Thr 105 Lys Ile Ala Phe Thr Arg Cys Gln Glu Ala 115 120 <210> 10855 <211> 118 <212> PRT <213> Enterobacter cloacae <400> 10855 Ala Thr Leu Leu Tyr Leu Phe His Val Asn Arg Gly Gly Asp Met Gln Ile Glu Lys Val Met Ser Leu Leu Glu Val Leu Ser Ser Trp Leu Glu 20 25 Asp Asn Ile Asn Met Asp Ser Glu Ile Ile Phe Asp Asn Asp Glu Asp Asn Thr Asn Ser Glu Ile Leu Tyr Pro Ala Val Glu Lys Ala Asn Ala Val Leu Arg Lys Met Ala Ser Leu Ser Ser Asp Ser Val His Ala Ile 70 75 Arg Gln Arg Leu Gln Leu Ala Val Glu Gly Lys Ala Glu Leu Ser Leu 90 Lys Asp Val Gly Glu Leu Leu Leu Ala Thr Lys Tyr Leu Met Leu Ser 100 105 Thr Glu Glu Gly Glu 115 <210> 10856 <211> 63 <212> PRT <213> Enterobacter cloacae <400> 10856 Lys Gly Asp Leu Met Lys Pro Phe Gly Leu Ala Gly Lys Pro Arg Pro 10 Glu Pro Cys Gly Cys Cys Trp Tyr Thr Arg Glu Asp Cys Pro Tyr Val 25 Ser Ala Lys Gln Ile Tyr Arg Arg Gln Arg Lys Ala Glu Arg Gln 40 Arg Gln Arg Ser Thr Ile Val Met Ala Val Ser Glu Phe Arg <210> 10857 <211> 64 <212> PRT <213> Enterobacter cloacae <400> 10857 Lys Asn Arg Tyr Ala Gly Lys Arg Val Ile Pro Pro Phe Ser Thr His Asn Phe Thr Val His Leu Pro Leu Thr Leu Pro Val Ile Asn Gly Ile Leu Ser Asp Trp Ala Asp Pro Thr His Asn Leu Asn Cys Trp Leu Thr

40 Val Leu Gln Pro Asn Ser Leu Leu Tyr Leu Ala Gly Val Arg Pro 55 <210> 10858 <211> 174 <212> PRT <213> Enterobacter cloacae <400> 10858 Cys Cys Pro Leu Lys Arg Glu Ser Lys Pro Val Thr Thr Leu Val Phe Glu Met Ala Asp Ile Asn Lys Leu Ile Glu Glu Ile Arg Thr Ala Lys 20 25 Thr Phe Ser Val Thr Pro Asp Gln Ile Tyr Asp Pro Ala Cys Tyr Pro Gly Gly Ala Leu Leu Asn Ala Glu Gly Gln Thr Glu Glu Glu Ala Arg 55 Lys Ala Gly Arg Val Phe Phe Pro Ser Ser Lys Ile Ala Ser Thr 70 75 His Leu Val Pro Lys Val Leu Leu Ala His Ser His Gly Val Tyr Leu 85 90 Ile Thr Asn Ala Glu Leu Glu Gly Ser Pro Ala Ser Arg Asp Thr Val 105 Ala Tyr Ala Gln Gly Met Asn Pro Lys Leu Asp Glu Asp Trp Asp Tyr 120 Ala Cys Asp Ala Ala Leu Gly Gly Ser Asp Cys Ser Tyr Thr Ile Pro 135 Val Glu Trp Leu Glu Leu Ala Val Glu Gln Gly Phe Gln Glu Phe Arg 150 Leu Arg Met Ser Glu Thr Asn Ile Lys Leu Val Ser Lys 165 <210> 10859 <211> 77 <212> PRT <213> Enterobacter cloacae <400> 10859 Glu Phe Ser Leu Asn Gly Arg Gln Pro Met Lys Met Phe Phe Thr Pro Tyr Val Arg Ile Val Phe Tyr Phe Cys Ala Leu Ile Phe Ile Val Tyr 25 Ser Phe Ser Asp Phe Phe Gln Gly Val Pro Asp Ser Thr Phe Phe Ser 4.5 40 Ala Val Ile Thr Leu Leu Val Ile Gly Thr Ile Val Ala Arg His Leu Asp Arg Lys Lys Ser Leu Lys Tyr Thr Ser Gln Ile <210> 10860 <211> 81 <212> PRT <213> Enterobacter cloacae <400> 10860 Phe Asn Lys Asp Arg Phe Met His Asn His Glu Ile Gln Thr Ile Ala Ile Phe Ser Ala Gln Tyr Lys Asn Ile Glu Asp Ala Glu Asn Ala Gly

Ala Leu Tyr Ser Val Asp Ile Glu Tyr Pro Met Thr Leu Asn Asp Leu

40 Ser Arg Leu Cys Asp Ser Ile Ala Glu Ala Val Gly Val Pro Gly Gly 55 60 Val Lys Tyr Gln Phe Val Ser Gln Pro Glu Ala His Glu Thr Ser Phe <210> 10861 <211> 79 <212> PRT <213> Enterobacter cloacae <400> 10861 Pro Val Thr Lys Leu Pro Lys Ser Arg Cys Lys Ala Met Lys Gln Thr 10 Lys Ser Ser Met Ser Arg Ile Val Gln Leu Tyr Asp Gly Ser Arg Tyr Gly Asn Cys Glu Gln Ala Asp Asn Glu Gly Glu Leu Phe Thr Val Val Leu Asn Lys Pro Ser Gln Ile Asp Asp Ile Arg Lys Ile Val Asp Thr Thr Ala Glu Val Leu Gly Lys Ala Leu Pro Val Leu Leu Phe 70 <210> 10862 <211> 109 <212> PRT <213> Enterobacter cloacae <400> 10862 Ser Gly Glu Ser Ile Met Ile Thr Ser Leu Met Asn Phe Arg Asp Leu Thr Gly Glu Ala Val Ile Gln Ala Arg Gln Cys Val Ile Asn Ala Glu Ile Glu Ala Ala Arg Glu Lys Val Ile His Ala Arg Ser Leu Phe Lys 40 Ala Gly Ile His Asn Val Val Asn Gly Ser Ser Gly Ile Lys Ala Ala 55 Ala Ala His Phe Leu Val Ile Lys Arg Leu Gln Thr Asp Thr Arg Tyr 75 Leu Asp Ala Val Ile Thr Asp Asn Leu Cys Met Phe Ser Pro Glu Gly 90 8.5 Tyr Leu Tyr Leu Phe Met Gln Gln Arg Tyr Phe Leu <210> 10863 <211> 97 <212> PRT <213> Enterobacter cloacae <400> 10863 Gly Tyr Asn Met Lys Ile Ser Gln Leu Glu Ser Gly Met Gln Val Trp 10 Ser Val Thr Arg Thr Lys Met Gly Asn Thr Thr Ile Ser Thr Val Ile 25 Val His Pro Val Val Ile Ile Glu Ile His Asp Asn His Val Ile Ala Arg Trp Asn Gly Asn Ala Pro Arg Arg Phe Gly Glu Thr Ala Ile Arg

Gly Trp Lys Lys Glu Lys Pro Leu Leu Val Arg Glu Pro Phe Gly Asn

Gly Leu Ser Thr 115

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70
                                        75
Val Arg Leu Ala Thr Arg Ala Glu Lys Thr Ala Met Gln Glu Lys Glu
                                     90
<210> 10864
<211> 206
<212> PRT
<213> Enterobacter cloacae
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Gln Glu Trp Gly Met Thr Glu Leu Asn Lys Ser Pro Ser Gly Phe Ser
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Gly Ala Asp Val Ser Lys Glu Gln Ala Ala Ile Arg Ala Leu Val Glu
Arg Val Val Thr Asn Tyr Arg Ser Arg Thr Ala Pro Asp Arg Val Gln
Lys Ala Ser Val Ala Phe Asn Gly Gly Leu Ile Leu Thr Leu Met Leu
Ala Leu Thr Leu Leu Gly Tyr Leu Val Ala Glu Leu Leu Arg Gly Tyr
                    70
Val Ala Asp Ser Ser Pro Tyr Val Pro Gly Leu Ser Tyr Ser Gln Phe
                85
                                    90
Ser Met Leu Met Val Val Glu Leu Cys Leu Cys Phe Leu Ala Trp Phe
                                105
Leu Val Val Thr Gly Asp Tyr Pro Arg Pro Trp Ile Phe Gln Val Val
                            120
Pro Met Glu Gln Tyr Trp Phe Phe Asp Glu Val Asp Asp Asp Asp Leu
                        135
Ala Arg Leu Ser Cys Asn Pro Tyr Ile Lys Arg Trp Leu Leu Asp Glu
                    150
                                        155
Met Ser Gly Ile His Arg Leu Thr Tyr Thr Arg Leu His Asp Arg Leu
                                    170
Glu Arg Ile Cys Asn Ile Ala Ser His Leu Glu Tyr Ser Arg Ile Gln
                                185
Ala His Lys Ile Ser Leu Ile Asn Gly Ser Ser Ala Ser
        195
                            200
<210> 10865
<211> 117
<212> PRT
<213> Enterobacter cloacae
<400> 10865
Phe Ala Lys Leu Arg Gly Ile Ser Leu Met Ala Glu Leu Tyr Ile Thr
                                    10
Ile Ser Val Ile Phe Lys Ser Ala Gly Tyr Ser Asn Asn Cys Thr Glu
Gln Arg Phe Glu Leu Gln Cys Ile Arg Arg Val Cys Asp Asn Asn Lys
                            40
Ala Leu Pro Val Leu Leu Lys Met Glu Glu Phe Lys Thr His Thr Ala
                        55
Gly Met Ser Glu Ala Arg Tyr Ile Met Pro Ala Tyr Lys Gly Arg His
                    70
                                        75
Asn Leu Phe Phe Ser Arg Thr Arg Arg Ser Phe Leu Thr Trp Glu Ala
               85
                                    90
Val Glu Ser Val Pro Val Arg Gly Trp His Ala Leu Ala Phe Ser Pro
                                105
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<210> 10866
<211> 179
<212> PRT
<213> Enterobacter cloacae
<400> 10866
Lys Lys Cys Arg Thr Trp Tyr Cys Cys Val Val Ala Gln Leu Asn Asn
                                    10
Gln Pro Lys Glu Arg Thr Lys Met Ser Ala Ile Glu Thr Glu Val Lys
            20
Asn Asn Ser Asn Glu Ile Ser Leu Arg Gly Tyr Leu Glu Arg Thr Gly
                            40
Asn Gly Ala Arg Lys Gly Asn Gly Leu Ile Ile Asp Pro Ser Val Val
                        55
Val Gln Glu Gly Phe Asn Thr Arg Thr Ala Gly Met Gly Glu Leu
                    70
Tyr Tyr Ser Met Pro His Val Val Glu His Leu Asn Ser Leu Ala Asp
                                    90
Ala Tyr Met Glu Asp Pro Phe Ser Val Thr Pro Ile Val Val Gln Met
            100
                                105
                                                    110
Val Asn Gly Val Pro Val Leu Arg Gln Gly Ala Cys Arg Ile Arg Ser
        115
                            120
Ile Ala Ile Ala Asn Arg Gln Leu Glu Ala Glu Gly Arg Glu Arg Ile
                        135
Thr Arg Ile Arg Cys Glu Gln Phe Arg Gly Ser Ala Ser Lys Ala Glu
                    150
                                        155
Leu Phe Thr Leu Thr Gly Asn Ser Asn Leu Ala Leu Ser Val Val Thr
                                    170
Glu Ala Leu
<210> 10867
<211> 68
<212> PRT
<213> Enterobacter cloacae
<400> 10867
Ala Gly Ala Asp Lys Met Glu Asp Ala Ile Asn Val Pro Ile Thr Tyr
                                    10
Tyr Asp Ser Asn Gly Cys Leu Ile Val Gly His Asn Leu Val Gly Lys
                                25
Ile His Pro Gln Leu Phe Asp Lys Leu Val Arg Arg Ser Asn Asp Gly
                            40
                                                45
Ser Thr Arg Cys Gln Gln Ala Lys Ile Thr Ser Tyr Leu Glu Gly Leu
   50
                        55
Leu Asn Gly
<210> 10868
<211> 92
<212> PRT
<213> Enterobacter cloacae
<400> 10868
Arg Gly Asn Arg Ile Met Ser Ile Pro Met Lys Gly Leu Ser Lys Arg
                                    10
Gly Trp Tyr Asn Ser Leu Thr Asp Ser Val Glu Tyr Lys Tyr Phe Asn
                                25
Gly Gln Thr Glu Ile Ser Glu Ser Ala Tyr Lys Leu Leu Ala Ser Gly
```

Asn Lys Pro Lys Pro Thr Val Lys Pro Ala Lys Ala Val Thr Thr Tyr 50 55 60

Lys Val Lys Pro Lys Pro Thr Ile Glu Gln Gln Arg Asp Ala Ala Leu 65 70 75 80

Lys Glu Ala Ile Lys Gln Met Val Ser Gly Gly 85 90

<210> 10869

<211> 99

<212> PRT

<213> Enterobacter cloacae

<400> 10869

 Lys
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 Val
 Pro
 Val
 Arg
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Leu Ala Arg

<210> 10870

<211> 307

<212> PRT

<213> Enterobacter cloacae

<400> 10870

10 Leu Gln Glu Val Ser Asn Met Thr His Ile Phe Tyr Glu Phe Ser Ser 25 Leu Lys Pro Gly Val Pro Asp Val Glu Thr Leu Met Glu Val Ile Asn 40 Ser Ser Glu Leu Thr Arg Phe Val Met Gly Ala Glu Val Val Asp Phe 55 Val Lys Lys Ala Leu Ile Val Asn Thr Thr Ile Gly Ser Phe Lys Asn 70 75 Cys Tyr Phe Ala Phe Asp Asp Gly Ala Tyr Phe Leu Glu Phe Asp Gly 90 85 Lys Gly Lys Ser Arg Arg Phe Thr Glu Val Pro Asp Trp Phe Val Ser 100 105 110 Pro Ala Glu Phe Ala Arg Ser Gln Trp Leu Ile Asn His Asp Leu Ala 115 120 125 Asp Val Lys Ala Thr Ala Phe Ile Asp Val Leu Met Ser Tyr Pro Leu 135 140 Lys Glu Arg Arg Ala His Cys Asn Leu Leu Phe Gly Leu Asp Leu His 150 155 Lys Val Asn Val Val Pro Ala Pro Thr Ala Pro Ala Gly Lys Met Gly 170 Asn Lys Asn Gly Lys Thr Thr Lys Pro Arg Val Thr Asp Leu Gly Ser 185 Phe Glu Leu Phe Thr Ala Phe Phe Ala Arg Met Lys Thr Ala Val Asn 200

Ala Asn Glu Phe Pro Thr Leu Gln Val Leu Thr Gly Gln Glu Asp Leu

Pro Ile Ala Ser Val Lys Leu Phe Ala Cys Leu Leu Ser Pro Leu Ser

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215
                                            220
Thr Lys Ala Pro His Asn Leu Lys Gln Gly Ile Arg Thr Trp Phe Lys
                   230
                                        235
Ala Ile Thr Gly Asp Leu Pro Pro Asn Asn Lys Arg Val Gly Ala Gly
                245
                                    250
Asn Ala Val Leu Phe Cys Ala Pro Val Arg Glu Gln Ile Gln Gln Ile
                                265
Glu Ala Ile Gly Leu Glu Lys Tyr Tyr Gln Gly Leu Ser Lys Ala Ile
                            280
Ala Asp Ala Gly Asp Gly Phe Ile Thr Asp Phe Ser Tyr Thr Trp Ser
    290
                        295
Glu Lys
305
<210> 10871
<211> 86
<212> PRT
<213> Enterobacter cloacae
<400> 10871
Arg Ser His Asp Phe Gln Glu Gly Ala Phe Ala Ala Gly Gly Thr
                                    10
Gly Tyr Gln Phe Lys Phe Ala Arg Arg Glu Thr Lys Ile Asp Val Leu
                                25
Lys Asp Gly Val Ile Thr His Thr Lys Ala Asn Ile Pro Asp Ile Gln
        35
                            40
Lys Ile Phe Phe Ile Ile His Ser Asp Ser Ile Asn Arg Cys Asp Lys
                        55
Lys Ser Leu Lys His Asn Pro Phe Arg Tyr Ala Ala Leu Ile Ala Leu
Thr Tyr Ser Lys Cys
                85
<210> 10872
<211> 62
<212> PRT
<213> Enterobacter cloacae
<400> 10872
Arg Cys Trp Ala Asn Val Ile Thr Val Leu Ser Gly Glu Gln His Asp
                                    10
Ser Phe Lys Thr Ser Lys Arg Leu Ile Glu Leu Ile Leu Ile Thr Asn
                                25
Ile Thr Gly Asp Ser Asn Ile Arg Ile Lys Met Thr Leu Leu Phe Val
                            40
Glu Val Ser Asn Ile Lys Ile Ser Leu Gly Asn Leu Asp
<210> 10873
<211> 64
<212> PRT
<213> Enterobacter cloacae
<400> 10873
Cys Phe Ala Gly Trp Arg Phe Ala Tyr Pro Ala Tyr Arg Thr Val Gly
                                    10
Pro Val Ser Ala Ser Ala Thr Gly Gln Gln Lys Gly Asp His Thr Val
                                25
Ala Phe Phe Tyr Tyr Asn Ser Ser Arg Ala Ala Asp Thr Met Ser Cys
Ala Val Arg Pro Tyr Ser Phe Cys Lys Lys Ser Cys Val Pro Thr
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5994
    50
                        55
<210> 10874
<211> 61
<212> PRT
<213> Enterobacter cloacae
<400> 10874
Phe Asp Glu Leu Thr Leu Ile Val Tyr Gly Pro Ile Arg Leu Ala Gln
Asp Thr Arg Tyr Gly Val Ala Met Thr Lys Tyr Phe Glu Arg Cys His
                                25
Ser Leu Leu Trp Phe Cys Thr Lys Ile Leu Ile Phe Ile Arg Glu Val
                            40
Glu Val Gln Pro Cys Arg His Pro Lys Ser Arg Pro
                        55
<210> 10875
<211> 84
<212> PRT
<213> Enterobacter cloacae
<400> 10875
Ala Ser Asp Lys Val Ile Gly Leu Asp Val Phe Ala Asp Leu Val Val
                                    10
Val Asp Gly Ala Ile Thr Tyr Gln Arg Val Ser Asp Glu His Leu Pro
            20
                                25
Val Leu Asn Asn Glu Arg Lys Arg Asn Gly Arg Ser Gly Leu Val Arg
                            40
Tyr Gly Glu Ala Val Ser His Glu Asp Asn Leu Arg Leu His Ala Gly
```

75 70 Ile Ala Gly <210> 10876 <211> 70

<400> 10876

<212> PRT

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Phe Leu Ile Lys Ile Lys His Glu Ile Ser Gly Lys Pro Val Leu Asn Leu Ile Ala Gly Lys Gly Cys Phe Val Leu Lys Tyr Ile Pro Thr Leu Asp Val Leu Asn Gly Ile Thr Phe Lys Leu Ser Val Asp Asn Thr Phe Pro Leu Arg Pro Asp Ser Leu Ile Gln Phe His Gln Pro Gly Ile Ile Ile His Phe Val Tyr

Arg Arg Ile Leu Asn Ala Asp Pro His Pro Cys Arg Val Ile Leu Thr

<210> 10877 <211> 138 <212> PRT <213> Enterobacter cloacae <400> 10877

<213> Enterobacter cloacae

Gly Ile Ile Met Ile Arg Met Glu Val Lys Gly Leu Gln Glu Phe Glu 10

Arg Gln Leu Leu Ser Leu Gly Glu Lys Val Gly Thr Gln Val Leu Arg 20 25 Glu Ala Gly Lys Ala Ala Leu Glu Pro Val Leu Glu Asp Met Lys Ala 40 45 His Ala Gly Tyr Asp Glu Ser Ala Lys Asp Glu His Met Arg Asp Ser 55 Ile Lys Ile Arg Ser Ser Ser Lys Ala Lys Gly Asn Ala Val Val 75 70 Tyr Leu Arg Val Gly Pro Ser Lys Lys His Phe Ile Lys Ala Leu Ala 85 Gln Glu Met Gly Thr Val Lys Gln Val Ala Ser Pro Phe Ile Arg Pro 100 105 Ala Leu Asp Tyr Gln Lys Ala Lys Val Leu Arg Ile Leu Ala Ile Glu 120 Ile Arg Asp Arg Ile Glu Asn His Arg 130 135 <210> 10878 <211> 135 <212> PRT <213> Enterobacter cloacae <400> 10878 Arg Phe Tyr Gly Thr Asn Leu Cys Ala Asn Leu Cys Ser Lys Gln Arg Ser Lys Thr Met Lys Ile Val Leu Ser Val Leu Leu Leu Thr Ala Phe Asn Ser Tyr Ala Gly Thr Val Asp Asp Tyr Leu Glu Arg His Ser Glu 35 40 Ile Lys Ser Asn Ser Val Ala Glu Thr Tyr Val Ser His Tyr Ala Phe 50 55 Met Ile Ala Met Met Glu Ala Gln Gln Lys His Asn Arg Ser Asp Asn 70 Glu Phe Ile Thr Gly Leu Leu Ser Asn Asn Gly Asp Val Tyr Ala Arg 85 Leu Ala Val Lys Lys Leu Ala Asn Asp Cys Leu Thr Gln Arg Ser Ile 100 105 110 Gly Gln Ser Gly Glu Leu Asn Asn Lys Glu Cys Asn Ile Val Ile Arg 120 Ala Asp Lys Ser Glu Gln 130 135 <210> 10879 <211> 125 <212> PRT <213> Enterobacter cloacae <400> 10879 Leu Ile Thr Ile Ala Ala Phe Gly Pro Leu Phe Phe Arg Gly Lys Gln 10 Met Leu Asp Gln Asn Val Val Lys Gln His Cys Arg Ile Asp Thr Asp 25 Phe Thr Gly Asp Asp Ala Leu Leu Glu Ile Tyr Thr Gly Ala Ala Ala 35 40 45 Arg Tyr Val Gln Thr Trp Thr Arg Arg Thr Leu Tyr Glu Lys Glu Ser 55 60 Ser Pro Gly Tyr Ala Asp Asp Pro Asp Pro Ile Leu Leu Asn Asp Asp 70 75 Val Lys Ala Ala Met Leu Leu Ile Gly His Trp Tyr Ala Asn Arg 90

Glu Ser Val Val Ile Gly Glu Thr Val Ser Gln Val Pro Leu Ala Val

```
100
                               105
                                                   110
Glu Ala Leu Leu Gln Pro Tyr Arg Ile Tyr Gly Leu
                            120
<210> 10880
<211> 127
<212> PRT
<213> Enterobacter cloacae
<400> 10880
Gly Glu Leu Arg Glu His Gly Asn Gly Arg Pro Leu Thr Gly Pro Leu
Phe Phe Gln Glu Asn Trp Met Ala Glu Tyr Gly Val Gln Thr Trp Asp
Ala Ser Gly Lys Val Asn Asn Tyr Gly Val Lys Pro Val Ser Val Cys
Gly Tyr Leu Gln Leu Ala Gln Asn Gln Lys Thr Gly Ser Tyr Thr Val
    50
                        55
                                            60
Ala Leu Pro Pro Gly Cys Arg Leu Thr Tyr Phe Gln Ser Met Asn Gly
                    70
                                        75
Asp Gln Phe Gly Thr Ser Arg Arg Lys Ile Thr Ile Ser Gly Gly Thr
                                    90
Ala Thr Val Ser Ala Ala Gly Asp Thr Asp Tyr Ser Ala Gly Thr Glu
            100
                                105
Pro Ala Ala Ala Tyr Leu Ile Phe Gln Ile Glu Arg Ala
        115
                            120
<210> 10881
<211> 473
<212> PRT
<213> Enterobacter cloacae
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Ala Pro Thr Arg Ser Pro Ala Pro Pro Ala Thr Asn Pro Phe Ser Phe
Glu Gln Thr Pro Leu Arg Arg Gly Phe Leu Leu Pro Gly Glu Asn Met
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Ile Tyr Thr Thr Gly Thr Ile Ala Ile Ser Gly Asn Thr Leu Thr Gly
Thr Gly Thr Asn Phe Thr Ala Ala Gly Ser Leu Ile Arg Asn Gly Cys
                        55
Thr Val Ile Ala Met Thr Ser Pro Val Gln Val Phe Gln Ile Thr Thr
                    70
                                        75
Ile Gly Ser Ala Thr Ser Leu Thr Val Thr Pro Ala Ala Asn Pro Ala
                                    90
                85
Val Pro Ala Gly Thr Arg Phe Ala Ile Leu Leu Ser Asp Ser Leu Ser
                                105
                                                    110
Val Asp Gly Leu Ala Gln Asp Ile Ala Glu Thr Phe Thr Met Tyr Gln
                            120
Arg Tyr Met Ser Gly Phe Ala Asp Val Met Asn Gly Thr Ser Asp Val
                       135
                                            140
Thr Ile Thr Ile Asn Gly Thr Ala Val Thr Val Pro Gly Gln Lys Ser
                    150
                                        155
Leu Ala Lys Lys Gly Ala Asn Ser Asp Ile Thr Ser Leu Ser Gly Leu
                                    170
Lys Thr Ala Leu Ser Ile Glu Gln Gly Gly Thr Gly Ala Lys Asn Ala
                                185
Ala Asp Ala Arg Thr Asn Leu Gly Leu Gly Thr Ser Ala Thr Leu Asn
                            200
Ala Arg Pro Asn Glu Thr Tyr Pro Thr Asp Gly Val Leu Thr Val Gly
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Gln Tyr Gly Ile Gly Ala Gln Asn Pro Pro Leu Thr Thr Asp Phe Lys
                    230
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Thr Ile Asp Arg Gly Gly Ile Phe Ala Gly Ala Gly Ser Ala Gly Val
                245
                                    250
Asn Phe Tyr Asn Ala Phe Ala Pro Val Leu Val Met Ser Arg Tyr Ser
                                265
Ser Ser Ala Met Gln Ala Ile Gln Ala Asp Asn Ser Thr Leu Ala Phe
                            280
Asn Ile Lys Asp Gly Asn Gly Trp Arg Gly Trp Val Lys Lëu Tyr Ser
                        295
                                            300
Glu Asn Asn Thr Thr Arg Ala Ser Asp Gly Thr Leu Lys Val Ala Ser
                    310
                                        315
Pro Val Val Arg Ile Val Arg Ser Gln Glu Glu Cys Arg Arg Ala Asp
                                    330
                325
Val Asp Lys Asp Gly Phe Ser Trp Cys Gly Cys Gly Thr Ala Asn Ala
            340
                                345
Glu Ala Glu Gly Val Thr Leu Phe Arg Leu Asp Val Gly Val Tyr Val
                            360
        355
                                                365
Ile Ser Gly Ser Ala Gly Leu Ala Ser Glu Gly Trp Gln Leu Leu Pro
                        375
                                            380
Pro Met Asp Pro Gly Gly Met Gly Glu Leu Gly Val Val Glu Ala Glu
                    390
                                        395
Gln Thr Glu Ser Gly Gly Leu Thr Ile Arg Leu Phe Lys Arg Lys Tyr
                405
                                    410
Ile Leu Ser Glu Glu Gly Glu Ile Val Lys Thr Lys Gly Ala Pro Ile
            420
                                425
Asp Val Pro Ala Asn Ser Trp Ile Asp Val Arg Leu Asp Met Pro Glu
                            440
Asp Ser Ile Trp Lys Thr Arg Ala Ser Glu Ala Ser Leu Glu Leu Thr
                        455
Glu Gln Pro Glu Asp Ile Gln Pro
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<211> 166
<212> PRT
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Ala Asp Lys Thr Ser Pro Glu Tyr Ala Met Leu Pro Ala Gly Thr Val
                                25
Val Met Trp Gly Ala Ala Gly Ser Asp Val Ala Thr Met Lys Pro Leu
                            40
Ile Asn Cys Lys Ala Leu Gly Ala Thr Gly Gln Thr Gly Ser Phe Val
                        55
Asp Cys Thr Thr Leu Ile Asp Thr Ser Lys Gln Phe Ile Ser Asp Leu
                    70
                                        75
Pro Glu Gly Pro Glu Lys Ser Leu Gly Phe Ile Asp Asp Pro Ala Asn
                85
                                    90
Gln Asp Phe Ala Asp Phe Leu Asn Ala Ala Glu Asn Arg Glu Thr Val
                               105
Gln Phe Tyr Val Glu Leu Pro Asn Gly Arg Thr Ala Asn Met Ile Leu
                           120
Ala Leu Ser Gly Trp Gln Met Asn Glu Ile Thr Ala Pro Ala Ser Glu
                        135
Val Ile Gln Ile Thr Val Gln Gly Lys Gln Asn Asn Ile Thr Trp Gly
Thr Ala Ala Gly Ser
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<211> 126
<212> PRT
<213> Enterobacter cloacae
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Phe Ser Gly Lys Thr Met Ser Thr Ile Asp Val Ser Ala Leu Lys Ser
Ala Leu Leu Lys Pro Lys Ser Ala Val Val Thr Ala Glu Ile Phe Gly
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                                25
Thr Thr Val Tyr Leu Arg Arg Met Thr Ala Gly Glu Leu Ile Asp His
                            40
Glu Glu Ala Leu Arg Asp Ser Gln Ile Ala Glu Asp Ala Arg Lys Ala
                        5.5
Ser Glu Ile Ser Val Gln Leu Ile Val Asp Cys Leu Val His Pro Asp
                    70
                                        75
Gly Ser Leu Ile Ala Ala Lys Asp Lys Pro Thr Ala Ala Glu Leu Leu
                                    90
                85
Gln Thr His Asp Asn Val Ala Leu Leu Asp Ala Ile Ala Thr Val Lys
            100
                                105
Lys His Ala Leu Gly Lys Leu Glu Asp Ala Glu Lys Asn
        115
                            120
<210> 10884
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<212> PRT
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Pro Ser Pro Arg Trp Gly Glu Gly Ile Val Leu His Leu Cys Glu Ser
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Ser Ser Met Arg Ile Lys Thr Gly Leu Met Val Ala Ala Phe Val Met
Leu Ala Gly Cys Asn Ala Pro Ala Gln His Val Pro Val Glu Thr Cys
Lys Ala Asp Asn Gln Met Gln Gln Thr Thr Leu Tyr Phe Gly Leu Asn
Arg Pro Ala Gly Ala Gln Ile Thr Gly Ser Glu Trp Gln Gln Phe Val
                    70
Asp Gln Asp Val Thr Pro Arg Phe Arg Asp Gly Leu Thr Val Phe Asp
                                    90
Ala Arg Gly Gln Trp Leu Gly Asn Asp Gly Lys Val Ala Arg Glu Pro
                                105
                                                     110
Ser Lys Ala Leu Met Leu Ile His Gly Lys Asp Ala Gln Ser Glu Lys
                            120
                                                 125
Asn Ile Glu Ala Leu Arg Gly Ile Tyr Lys Ser Arg Phe Ala Gln Glu
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                                            140
Ser Val Met Arg Val Asp Gln Pro Val Cys Val Gln Phe
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<211> 81
<212> PRT
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Phe Glu Ala Gly Ala Gln Glu Val Asn Leu Leu Arg Arg Lys Pro
                                25
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Asp Phe Ile Val Tyr Phe His Ala Asp Lys Lys Arg Pro Asn Thr Ile 40 Pro Val Phe Gly Pro Gly Lys Trp Leu Leu Gly Glu Ser Arg Ala Leu 55 Lys Val Gly Ile Asn Ala Gly Ser Ile Ala Leu Pro Phe Lys Asn Arg 70

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<210> 10886
<211> 78
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<212> PRT

<213> Enterobacter cloacae

<400> 10886

Leu Lys Ala Gly Gln Leu Ser Asp Gln Pro His Tyr Met Ile Asn Ile Val Pro Phe Leu Ser Leu Pro Phe Val Phe His Ile Leu Val Gly Phe 25 Ile Arg Phe Arg Asp Glu Asn Lys Asn Thr Glu Ala Asn Lys Asn Asn 40 Glu Gly Asn Asp Asp Ala Arg Asn Gln Phe Pro Asp Cys Trp Arg Ile Val Leu Arg Gln Glu Thr Asp Thr Ile Gly Asn Glu Gly

<210> 10887 <211> 461 <212> PRT

<213> Enterobacter cloacae

<400> 10887

Arg Ile Tyr Lys Gln Gln Pro Asp Pro Asp Ser Thr Val Pro Val Val Met Ile Val Phe Leu Tyr Val Ile Ala Val Ala Met Gly Leu Ala Ile Arg Ala Leu Thr Trp Pro Glu Gln Glu His Val Thr Ala Leu Phe Phe Val Pro Ser Val Ile Leu Pro Ile Cys Val Val Ser Leu Leu Val Phe Thr Ser Phe Ile Phe His Asp Ala Asn Ile His Tyr Ala Glu Thr Arg Lys Phe Ile Ala Lys Glu Gln Glu Ile Asn Leu Lys Ala Tyr Ala Arg 8.5 Lys Asn Ile Ala Ile Ala Ala Trp Ser Ala Ile Thr Pro Leu Glu Glu 100 105 Pro Ala Leu Asn Met Leu Lys Leu Glu Glu Glu Phe Pro Leu Ala Pro 120 125 Lys Thr Pro Val Asn Ile Gln Leu Glu Asp Arg Phe Asp Gln Thr Arg 135 140 Asn Glu Gln Met Phe Tyr Arg Leu Leu Asp Pro Met Ala Glu Lys Leu 150 155 . Lys Asp Tyr Asn Tyr Arg Ile Phe Glu Thr Val Val Trp Val His Gly 165 170 Gly Ser Gly Ser Cys Ile Asp Glu Leu Arg Arg Thr Leu Glu Arg Leu 180 185 Gly Ile Glu Thr Ala Ser Thr Cys Lys Ile Glu Tyr Ser Thr Glu Cys 200 205 Pro Asp Tyr Ala Ile Val Ser Gln Trp Met Asn Leu Ser Asp Tyr Arg

Val Glu Asn Arg Leu Ile Val Ile Val Asp Leu His Glu Glu Ser Gly

220





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230
                                        235
Glu Ser Lys Ser Met Glu Asn Ala Cys Ala Phe Leu Leu Thr Ser His
                245
                            250
Tyr Val Arg Glu Glu Gly Glu Lys Pro Val Tyr Leu Tyr Gln Pro Met
                               265
Ser Asp Val Thr Asp Val Glu Asp Lys Met Ala Val Phe Leu Glu Thr
                            280
Gly Ser Val Leu Thr Pro Lys Asn Leu Trp Tyr Thr Gly Leu Ser Arg
                        295
Ile Glu Lys Tyr Pro Leu Met Gln Ala Leu Asp Lys Lys Ala Leu Thr
                    310
                                        315
Val Glu Arg Leu Asp Ile Asp Ala Ser Leu Gly Ala Lys Ser Ala Gly
                                    330
                325
Tyr Arg Trp Leu Ala Leu Ala Phe Ala Ala Asp Ala Val Lys Tyr Ala
                                345
                                                    350
            340
Gln Gly Glu Gln Leu Ala Ala Tyr Ser Asp Lys Asn Lys Phe Cys Ile
        355
                            360
                                                365
Thr Ser Leu Ser Ser Met Lys Thr Ala Ile Pro Lys Lys Leu Thr Trp
                        375
                                            380
Cys Asn Trp Ser Asn Pro Leu Tyr Pro Ala Gly Met Ala Ala Leu Phe
                                        395
                    390
Cys Val Leu Ser Leu Ile Ala Tyr Arg Ile Ser Phe Leu Ala Gln Asn
                405
                                    410
Asp Pro Pro Ala Ile Trp Glu Leu Ile Ala Ser Ile Ile Ile Pro Phe
                                425
Val Ile Phe Ile Gly Leu Gly Ile Phe Val Phe Ile Ser Lys Thr Asn
                            440
Glu Ala Tyr Glu Asp Met Glu Tyr Glu Trp Lys Arg
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<210> 10888

<211> 109

<212> PRT

<213> Enterobacter cloacae

### <400> 10888

 Met
 Pro
 Ala
 Val
 Ser
 Ala
 Leu
 Phe
 Thr
 Leu
 Asn
 Pro
 His
 Asp
 Ala
 Ile

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 15
 15

 Asp
 Asp
 Arg
 Pro
 Arg
 Lys
 Ile
 Ile
 Glu
 Lys
 Gln
 Asp
 Ile
 Thr
 Ser

 Cys
 Asp
 Asp
 Lys
 Tyr
 Gly
 Phe
 Thr
 Val
 Ser
 Cys
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 Val
 Leu
 Pro

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 Gln
 Asp
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 Gly
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 Asp
 Leu
 Pro

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 Tyr
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 Ala
 Lys
 Thr
 Gly
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 Val
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<210> 10889

<211> 129

<212> PRT

<213> Enterobacter cloacae

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# <400> 10889

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